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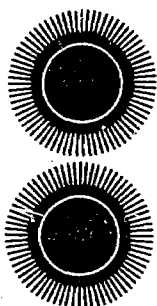
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ABSTRACT

Eighty-nine references, including research reports, texts, journal articles, and other research-related literature, are included in the bibliography on research concerning aurally handicapped children (both the deaf and the hard of hearing). The bibliography, containing bibliographic data, availability information, indexing and retrieval terms, and abstracts for all entries, is one in a series of over 50 similar compilations related to handicapped and gifted children. Author and subject indexes are provided. References were selected from Exceptional Child Education Abstracts. (KW)



AURALLY HANDICAPPED—RESEARCH

A Selective Bibliography

February 1971

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The Council for Exceptional Children
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401- 500	\$16.45	901-1,000	\$32.90

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ABSTRACTS

ABSTRACT 10082

EC 01 0082 ED 012 987
 Publ. Date 66 195p.
 Rainer, John D.; Altshuler, Kenneth Z.
Comprehensive Mental Health Services for the Deaf.
 New York St. Psychiatric Inst., New York., Dept. Med. Genetics.
 RD-1197
 EDRS mf,hc

Descriptors: exceptional child research; aurally handicapped; deaf; mental illness; mental health clinics; psychiatric services; children; adolescents; adults; medical treatment; occupational therapy; research needs; program descriptions; program evaluation; job placement; case studies (education); demonstration projects; mental health; psychiatric hospitals; medical evaluation; clinical diagnosis; group therapy; psychological services

A 3-year pilot project designed to demonstrate the value and feasibility of providing comprehensive mental health (psychiatric) services for the deaf established a clinical unit for the deaf with inpatient, outpatient, and after-care services. The clinic served 50 patients (minimum age 16) in the wards and 96 patients (all ages) in the outpatient service during this period. All clinic personnel were trained in manual communication and this facilitated diagnoses and treatment of the patients. Group therapy was found to be a very effective procedure with deaf patients. Occupational therapy and vocational placement services were provided in some cases. This program enabled discharge of almost 50 percent of the ward patients and facilitated improvement in one-fourth to one-third of the outpatients. The success of this project led to permanent establishment of the mental health clinic for the deaf. Important areas for future research are the development of techniques for preventive psychiatry and an exploration of the problems of rehabilitation for the deaf, especially the need for halfway homes. Case histories are presented as are protocols of the group therapy sessions. Figures, tables, charts, record forms, and operating procedures are available in the appendix. A 95-item bibliography is included. (RS)

ABSTRACT 10136

EC 01 0136 ED 016 349
 Publ. Date Aug 67 111p.
 Joiner, Lee M.; Erickson, Edsel L.
Scales and Procedures for Assessing Social Psychological Characteristics of Visually Impaired and Hearing Impaired Students.
 Western Michigan University, Kalamazoo
 OEG-3-6-068720
 EDRS mf,hc

Descriptors: exceptional child research; visually handicapped; aurally handi-

capped; tests; adolescents; blind; deaf; group tests; hard of hearing; learning theories; partially sighted; psychological characteristics; psychological tests; questionnaires; self concept; social characteristics; test construction; test reliability; test validity; Self Concept and Academic Ability Scale

This is a methodological study to determine if reliable and validly comparable data can be obtained from scales designed for use with hearing impaired, visually impaired, and non-impaired high school students. The major instruments assessed self concept of academic ability. It was concluded on the basis of cross-validation and other analytical procedures that reliable and validly comparable data can be obtained in mass testing when certain methodological procedures are followed. A subphase of the study included a comparative analysis of impaired residential and non-impaired public high school students. It was concluded that (1) self concept of ability accounts for more variation in grade point average than IQ, (2) self concept is an intervening variable between achievement and perceptions of others, (3) teachers evaluations have a greater impact on self concept of students who are impaired and in residential schools than on non-impaired students in public schools, (4) parents of hearing impaired residential students are perceived as being less concerned about how well they do in school when compared to parents of visually impaired and non-impaired students, and (5) the hearing impaired came from families with lower socioeconomic status levels. Recommendations are given for developing scales and administrative procedures for obtaining reliable and comparable social-psychological data through questionnaires and for extending social-psychological research involving hearing impaired, visually impaired, and non-impaired populations. Appendixes include questionnaire schedules, school records data, and additional tables. Forty references are given. (AA)

ABSTRACT 10149

EC 01 0149 ED N.A.
 Publ. Date Jul 67
 Rosen, Albert
Limitations of Personality Inventories for Assessment of Deaf Children and Adults as Illustrated by Research with the Minnesota Multiphasic Personality Inventory.
 Gallaudet College, Washington, D.C.
 Journal Of Rehabilitation Of The Deaf, Volume 1, 1967.
 EDRS not available

Descriptors: exceptional child research; aurally handicapped; tests; personality; personality assessment; deaf; personality tests; test results; test interpretation; test validity; reading comprehension; com-

prehension; college students; Minnesota Multiphasic Personality Inventory; MMPI; Gallaudet College

Pointing out the need for a structured personality inventory which is not dependent on oral language comprehension, the author sought to summarize responses of deaf college students to the Minnesota Multiphasic Personality Inventory (MMPI) and present conclusions regarding the limited validity for the deaf of this and other inventories. Ninety-six male and 83 female college preparatory students took the MMPI in 1963. Most profiles were of a psychotic type. Since profile results did not coincide with clinical impressions, a series of analyses was conducted to determine the reason for this discrepancy. Analyses of reading levels and ability to comprehend idioms showed the deaf students were very close to their limits of comprehension in attempting to understand the MMPI. An experiment requiring students (the 1964 preparatory class) to circle the items most difficult to comprehend showed item difficulty at a very elementary level. An item analysis showed large numbers of deviant responses, suggesting that the deaf interpret certain items differently from normal hearing persons, i. e., the deaf have a test taking behavior different from hearing persons. The study concluded that the MMPI should be administered to deaf subjects only for purposes of research or to deaf adults or older adolescents whose hearing loss is of recent onset. Further research is needed on tools of personality assessment for the deaf, both language dependent and non-verbal. This article was published in the Journal of Rehabilitation of the Deaf, Volume 1, Number 2, pages 47-52, July 1967. (JB)

ABSTRACT 10206

EC 01 0206 ED 018 016
 Publ. Date 63 279p.
 Rainer, John D., Ed. And Others
Family and Mental Health Problems in a Deaf Population.
 New York St. Psychiatric Inst., New York, Dept. Med. Gen.
 EDRS mf,hc

Descriptors: exceptional child research; aurally handicapped; demography; genetics; etiology; deaf; intelligence tests; family relationship; socialization; vocational adjustment; educational background; achievement; crime; siblings; psychological testing; psychotherapy; psychiatric services; psychiatric hospitals; schizophrenia; research needs; state surveys; statistical surveys; mental health planning; Mental Health Project for the Deaf; New York

The final report of the Mental Health Project for the Deaf is presented. Following an explanation of the project and its procedures and an historical review

of special education and mental health services are reports (by individual authors) of the research program within the New York State deaf population. The reports consider (1) methodological aspects--sampling procedures, (2) demographic aspects--number, distribution, marriage, and fertility statistics, (3) genetic aspects of early total deafness, (4) intelligence tests in deaf twins, (5) sexual patterns and family relationships, (6) patterns of socialization and community integration, (7) educational background and vocational adjustment, (8) deaf persons of outstanding achievement, and (9) delinquency and crime. Work on psychiatric considerations of the clinical outpatient program treats (1) operational description of a pilot clinic, (2) psychological testing--development and practice, (3) Rorschach data and clinical observations, and (4) psychotherapy for the deaf. For the clinical inpatient program, psychiatric considerations studied are (1) distribution and diagnosis of patients in New York State mental hospitals and (2) deafness and schizophrenia--a family study. Conclusions and recommendations made by the project treat (1) preventive mental health planning, (2) clinical management of deaf psychiatric patients, (3) areas for continued research, and (4) main findings and some projections. Graphs and tables appear throughout. A bibliography lists 253 items. This document is available from the Department of Medical Genetics, New York Psychiatric Institute, New York, New York. (JD)

ABSTRACT 10310

EC 01 0310 ED 017 116
Publ. Date Sep 66 58p.
Withrow, Frank B.; Lisensky, Robert
The Development of a Sex Education Curriculum for a State Residential School for the Deaf.
Illinois School For The Deaf, Jacksonville
OEG-32-23-0000-1030
EDRS mf,hc

Descriptors: exceptional child research; aurally handicapped; curriculum; sex education; educational programs; curriculum development; residential schools; deaf; children; curriculum research; curriculum planning; curriculum design; state schools; elementary grades; instructional materials; secondary grades; adolescents; evaluation; curriculum evaluation; program evaluation; teacher workshops; information dissemination; tests; pretesting; post testing

To counteract the negative attitudes and abnormal atmosphere among deaf children in residential schools, a sex education curriculum was developed by a study group composed of teachers of the deaf, social hygiene personnel, and a sociologist. A control group was obtained from the Indiana School for the Deaf matching factors such as age, sex, achievement, and IQ with an experimental group from the Illinois School for the Deaf. The K-12 sex education curriculum was presented to the experi-

mental group. Films and existing materials were adapted for use with the deaf whenever possible. Classes were mixed rather than separated by sex. The class on the elementary level (ages 6 to 11) focused on family relationships and growth patterns, the adolescent class (ages 12 to 15) dealt with the concepts of entering adolescence and becoming adult, and the high school level (ages 16 to 18) focused on preparation for and acceptance into adult society. A pretest and a posttest were given. The adolescent and high school test was designed to measure information and attitudes covered in the materials developed in the social and personal hygiene curriculum guides. The test for the elementary groups was designed as a nonverbal pictorial test. The experimental group of adolescents and the experimental high school age group scored significantly better (.01 level of confidence) on the posttest than the control group. Testing material may have contributed to the lack of significant difference on the elementary level. The materials and curriculum were evaluated and revised for general distribution by a study group after the experiment. The results of the experiment were also disseminated in a series of workshops. Suggestions for aiding other schools in establishing sex education programs are provided, including an inservice training program for both the academic and residential staffs and participation by the community and the parents. Sample tests, questionnaires, and responses are included. (AA/JD)

ABSTRACT 10320

EC 01 0320 ED 012 993
Publ. Date Feb 67 47p.
Rawls, Rachel F.
Training in Visual Perception for Young Deaf Children to Stimulate School Readiness.
Governor Morehead Sch., Raleigh, N.C.
OEG-2-P-068089-0153
EDRS mf,hc

Descriptors: exceptional child research; learning; perception; aurally handicapped; visual perception; learning readiness; visual learning; deaf; children; transfer of training; Wechsler Intelligence Scale for Children; Frostig Visual Perception Test; Illinois Test of Psycholinguistic Abilities; Nebraska Test of Learning Aptitude; Visual Discrimination Test; Raven Progressive Matrices

Twenty-two children enrolled in the beginning classes for the deaf at the Governor Morehead School participated in a visual training program. One group of 11 children received 20 individual training sessions during 10 weeks. At the completion of this training, the second group of 11 children received the same training program. The two groups showed no significant differences between means for age or performance of the Nebraska Test of Learning Aptitude for young deaf children and the performance scale of the Wechsler Intelligence Scale for Children (WISC). The

program comprised 13 sequences of activities including reproducing (from a model or a picture) patterns of blocks with varying color contrast and in a horizontal or vertical arrangement, assembling puzzles, matching by shape, color, and/or for configuration, and detecting embedded figures. The WISC and the Nebraska Test were administered to both groups before and after their training periods. Statistically significant gains were made between pre- and posttesting. Subtests with greatest gains were colored objects from the Nebraska Test and picture completion and coding from the WISC. Although both groups showed gains on the visual perception tests, Group 2 obtained lower scores on both tests. Means for the entire group were close to the means achieved by older children with 1 year of school experience who were also tested. Experienced persons working with the children felt the children used visual cues more meaningfully after the training program. Initial results indicate increased alertness to visual cues in objective measures which should be reflected in classroom achievement. Further testing is planned to determine if gains are sustained. Included are a 42-item bibliography and instructions for administering each of the 13 training sequences. (MY)

ABSTRACT 10547

EC 01 0547 ED 023 248
Publ. Date Sep 68 26p.
Ross, Mark; Lerman, Jay
A Picture-Identification Test for Hearing-Impaired Children. Final Report.
Connecticut University, Storrs
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-1-7-008038-0504
BR-7-8038

Descriptors: exceptional child research; aurally handicapped; tests; identification; hard of hearing; nonverbal tests; auditory discrimination; test reliability; correlation; word recognition; word lists; test results; deaf

The Word Intelligibility by Picture Identification Test (WIPI) was developed to measure speech discrimination ability in hearing impaired children. In the first phase of development, the word stimuli were evaluated to determine whether they were within the recognition vocabulary of 15 hearing impaired children (aged 6 to 12) and whether the pictorial representations of the words were adequate. The test was revised prior to the second phase to consist of 25 plates with six pictures on each plate, with only four of the pictures on each plate utilized as test stimuli. These four lists were given to 61 hearing impaired children (a mean age of 10-2 with a range from 4-7 to 13-9 years; a hearing level in excess of 30 decibels at one or more of the speech frequencies; and an average speech threshold of 52.2 decibels) on two separate occasions. There

was a learning effect (p less than .01) for three of the lists in the 1- to 3-week interval between tests. The results indicate reliability coefficients in excess of .87 for all four lists, with mean differences of less than 3% and correlation coefficients between lists greater than .84. (Author/JD)

ABSTRACT 10561

EC 01 0561 ED 023 203
 Publ. Date Jan 68 196p.
 Quigley, Stephen P.; And Others
Deaf Students in Colleges and Universities.
 Illinois University, Urbana, Institute For Research On Exceptional Children Vocational Rehabilitation Administration (DHEW), Washington, D. C.
 EDRS not available
 RD-12995
 Alexander Graham Bell Association For The Deaf, Inc., The Volta Bureau, 1537 35th Street, N. W., Washington, D. C. 20007 (\$6.50).

Descriptors: exceptional child research; aurally handicapped; deaf; hard of hearing; college attendance; graduate surveys; evaluation methods; case records; questionnaires; college graduates; college students; achievement; adjustment (to environment); academic achievement; occupations; professional occupations; social adjustment; grades (scholastic); Gallaudet College

In order to determine problems encountered and factors relating to successful attendance of deaf students at regular colleges, a self administered questionnaire was mailed to 992 persons. The 653 usable responses were divided into five groups for comparative analysis: Group A, those who graduated from a regular college. (224); Group B, those who did not graduate (131); Group C, those still in college (161); Group D, those who transferred from a regular college to Gallaudet (39); and Group E, those graduates of Gallaudet who later attended regular graduate schools (98). Subjects in Groups A and E were highly successful in terms of academic and professional accomplishments, were in professional occupations, and were well adjusted in their marital and social lives. Groups B and D's lower grades in college than Groups A and E seemed to be the major factor in termination or transfer to Gallaudet from regular colleges. In contrast to the graduates, Group C, still in college, used hearing aids more, had more home training and parental encouragement to attend college, and had grades comparable to Group B. Recommendations are given and 79 tables are included. (SN)

ABSTRACT 10644

EC 01 0644 ED 024 207
 Publ. Date Jun 68 98p.
 Haspiel, George S.; Siegenthaler, Bruce M.
Evaluation of Two Measures of Speech Hearing for Hearing Impaired Children. Final Report.
 Pennsylvania State University, University Park, Speech And Hearing Clinic

Office Of Education (DHEW), Washington, D. C., Bureau Of Research
 EDRS mf,hc
 OEG-32-48-0720-6012
 BR-6-1159

Descriptors: exceptional child research; aurally handicapped; tests; test results; test reliability; test validity; auditory tests; auditory evaluation; evaluation techniques; hard of hearing; hearing loss; auditory discrimination; correlation; auditory visual tests; testing; Threshold by Identification of Pictures Tests; TIP; Discrimination by Identification of Pictures Test; DIP

The Threshold by Identification of Pictures (TIP) Test and the Discrimination by Identification of Pictures (DIP) Test were evaluated. Test cards used pictures of items from the first 500 words of Basic Vocabulary for Elementary Children, and the children pointed to the article named. After each item, the tester's voice was reduced 5 decibels. In the DIP test, pictures were arranged in rhymed pairs with a distinction in consonants between the two word items. Of the 202 subjects, a random selection of 138 was used for final data analysis. Subjects were grouped by year (age range 4-10 to 12-10 years), had an IQ over 90, and included a variety of degrees, types, and patterns of hearing loss. All were screened for significant visual, neurological, motor, and emotional problems. It was concluded that the TIP and DIP tests were satisfactory measures, with a threshold correlation of .88 to .98 with pure tone thresholds for the TIP test and a test reliability of .60 to .84 for the DIP test. Twenty-six references and 21 tables are given. (Author/SN)

ABSTRACT 10682

EC 01 0682 ED 012 540
 Publ. Date Jan 67 68p.
 Silverman, Toby Rosalyn
Categorization Behavior and Achievement in Deaf and Hearing Children. Final Report.
 EDRS mf,hc
 OEG-32-42-0930-6030-P6-8024

Descriptors: exceptional child research; aurally handicapped; tests; language; cognitive processes; psycholinguistics; reading achievement; response mode; language development; achievement; academic achievement; pictorial stimuli; deaf; cognitive tests; cognitive development; cognitive ability; abstract reasoning; forced choice technique; classification; Triple Mode Test of Categorization

The Triple Mode Test of Categorization (TMT-CAT) was constructed and validated to measure three major modes of categorization postulated by Vygotsky: superordinate, functional, and associative. The TMT-CAT contains 131 test items which are pictures in forced choice pair comparisons. The child must indicate placement of a stimulus picture in one picture of the pair. This instru-

ment, along with the Stanford Achievement Reading Test, was administered to 313 hearing children, 225 typically deaf, and 27 special class deaf children. With increasing age as well as increasing grade average, superordinate and associative responding decreased while functional responding increased in deaf children. For hearing children, the factors of grade average and modes of categorization were accompanied by increased superordinate responding, decreased associative responding, and stable functional responding. When deaf and hearing children were matched on reading achievement scores, all differences in categorization behavior disappeared. Vygotsky's model was partially confirmed by the results, which also suggested that the deficiencies in categorization behavior may contribute to deficient language performance in the deaf child. (Author/SN)

ABSTRACT 10820

EC 01 0820 ED 025 091
 Publ. Date Sep 67 82p.
The Testing and Modification of Overhead Projection Transparencies for Special Use with Classes for the Deaf.
 Texas Education Agency, Austin
 Office Of Education (DHEW), Washington, D. C.
 EDRS mf,hc
 OEG-7-53-6210-296 NDEA-A-P-1320
 BR-5-0351

Descriptors: exceptional child research; aurally handicapped; audiovisual instruction; instructional materials; evaluation; audiovisual aids; transparencies; teacher developed materials; deaf; test results; children; cooperative planning; analysis of variance; statistical analysis

Transparencies for overhead projectors developed under the leadership of the Texas Education Agency for regular public school classes were modified for use with deaf students by five teachers in the Texas School for the Deaf and a total of 60 sets of modified and unmodified visuals (5,000 visuals) was made. Seven schools for the deaf in widely separated areas of the United States agreed to use both the modified and unmodified visuals on an experimental basis, in comparable classes (60 in all with 514 students), both classes having the same teacher. Student age, intelligence, and level of pretest performance were held constant statistically. Analysis of the pre- and posttest data by a statistician indicated no significant difference in achievement between experimental and control groups. There was, however, a highly significant difference between teachers on the subjects taught: earth science, p equals .0008; modern mathematics, p equals .00005; algebra, p equals .00005; geometry, p equals .00005; and world geography, p equals .00005. The project identified desirable modifications and some characteristics of high quality overhead transparencies for the deaf, and it was concluded that using a sizeable number of consultants

in a cooperative approach to educational research is a successful and efficient method. (Author/SN)

ABSTRACT 10920

EC 01 0920 ED 026 763
Publ. Date 68 40p.
Amcoff, Sven

Intelligibility of the Speech of Deaf Children.

Uppsala University, Sweden, Institute Of Education
EDRS mf,hc

Descriptors: exceptional child research; aurally handicapped; speech handicapped; communication (thought transfer); speech tests; speech evaluation; evaluation techniques; research reviews (publications); testing; listening comprehension; hearing loss; deaf; hard of hearing; speech skills; elementary school students; articulation (speech); educational experience

To develop a simple, inexpensive technique to quantify speech comprehension of pupils (aged 7 to 13) in special schools for the deaf, the verbal responses to pictures by 111 deaf pupils were judged for intelligibility by untrained listeners. Pupils were asked to identify 30 pictures; their taped replies were judged by listeners who wrote down what they thought they heard. The recording phase gave a measure of spoken vocabulary (SV) while the playback phase yielded a score for numbers of words correctly understood by the judges (UV). The ratio UV/SV gave a measure of speech comprehensibility (SC). Analysis of the data revealed that vocabulary and speech intelligibility increased with number of years in school (UV, p less than .001; SV and SC, p less than .005). Rank orders of speech quality were positively correlated with scales UV and SC; a moderate correlation existed between scales UV and SC and amount of residual hearing. The investigators concluded that judgment of speech intelligibility could be done reliably by untrained listeners, that quantity of speech production had little connection with speech comprehension within each grade, that results were similar for both understood vocabulary and speech comprehensibility, and that the magnitude of residual hearing is a poor predictor of both vocabulary and speech comprehension. (JB)

ABSTRACT 10928

EC 01 0928 ED 026 772
Publ. Date Oct 67 14p.
Luterman, David M.
A Parent-Centered Nursery Program for Preschool Deaf Children. Interim Report.
Emerson College, Boston, Massachusetts
Office Of Education (HEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-1-6-062069-1591
BR-6-2069

Descriptors: exceptional child research; aurally handicapped; parent education; preschool children; parent participation; hearing therapy; language development; deaf; group discussion; tutoring; behavior change; parent attitudes; speech instruction; staff orientation; evaluation needs; counseling instructional programs; Tracy Correspondence Course

To try to produce more capable deaf children through early parental education, eight families participated in a 2-semester program. Parents observed the children, age 18 months to 3 1/2 years, receiving language stimulation in free play in a nursery and observed individual therapy based on the Tracy Correspondence Course. Non-directive group meetings encouraged parents to find their own solutions to problems. Therapists met with parents to discuss the goals and techniques of therapy; parents administered therapy first to another child and then to their own. Lecture type and fathers only meetings were also held. Evaluation of program success based on staff observations indicated growth and change in all of the children and in many parents. Almost all children were lipreading, using speech meaningfully, and performing better in social and play situations. Parents seemed to be helped in resolving their initial confusion, in getting the problem of having a deaf child into perspective, in recognizing that the child was primarily language handicapped, and in appreciating the job of the therapist. (RP)

ABSTRACT 10932

EC 01 0932 ED 026 776
Publ. Date 68 192p.
Schmitt, Philip J. And Others
Supervisors and Supervision of Teachers of the Deaf.
Illinois University, Urbana, Institute For Research On Exceptional Children Vocational Rehabilitation Administration (DHEW), Washington, D. C.
EDRS mf,hc
RD-12995

Descriptors: exceptional child research; aurally handicapped; administration; supervisors; administrator evaluation; day programs; administrator qualifications; administrator responsibility; deaf; administrator role; residential programs; supervisory activities; salaries; teacher supervision; professional education; school administration; graduate study; teacher experience; standards

Data from 258 supervisors of teachers of the deaf who replied to a self administered questionnaire yielded information on the nature of supervisory programs. Of 108 day supervisors (D), 23% were supervisors only while 77% were also either teachers or administrators. One-third reported three-fourths to full time devoted to supervision; one-third reported one-fourth time or less. Day supervisors were responsible for wider age ranges of children and types of teachers supervised and tended to receive better

salaries. Of 150 residential supervisors (R), one-third were supervisors only, 93% worked with teachers of the deaf only, and two-thirds reported three-fourths to full time supervision. Both groups spent similar amounts of time per month with teachers; the majority had master's degrees (D-group 82%, R-group 67%); and degrees in deaf education, audiology, or speech correction were held by one-half of the D-group and one-third of the R-group. Results indicate a need for more supervisors, improvement in the quality of supervision, setting of standards for supervisory personnel, and professional consideration of these problems. (JB)

ABSTRACT 11042

EC 01 1042 ED N.A.
Publ. Date Jan 68 12p.
Meadow, Kathryn P.

Early Manual Communication in Relation to the Deaf Child's Intellectual, Social, and Communicative Functioning.

California University, Berkeley
Vocational Rehabilitation Administration (DHEW), Washington, D. C.
EDRS not available
American Annals Of The Deaf; VI13 N4 P29-41 Jan 1968

Descriptors: exceptional child research; aurally handicapped; communication (thought transfer); family (sociological unit); deaf; academic achievement; cognitive ability; social maturity; interpersonal competence; lipreading; speech skills; manual communication

To determine possible differences of levels of intellectual and social functioning and of communicative competence, 59 deaf children of deaf parents (mean IQ 111.5, 80% with a hearing loss greater than 80 decibels) were paired by sex, age, intelligence, and family size and occupation with 59 deaf children of hearing parents (mean IQ 108.9, 71% with hearing loss greater than 80 decibels). Differences favoring the deaf children of deaf parents were found in the following areas: the Stanford Achievement Test scores in reading, arithmetic, and overall grade level (p less than .01); teacher-counselor ratings for intellectual ability and use of ability (p less than .01) and for working hard (p equals .07); ratings for maturity, responsibility, independence, friendliness, and popularity (p less than .01); ratings of enjoyment of new experiences, responding with appropriate emotion, and showing appropriate sex-role behavior (p less than .05); and comparisons of facility with written language, receptive and expressive fingerspelling, and use of sign language (p less than .01). No differences between children of deaf parents and children of hearing parents were found on ratings of speechreading and speech. Indications were that those children most likely to be judged as having good communicative skills were those exposed to both oral and manual training at an early age. (GD)

ABSTRACT 11154

EC 01 1154 ED 016 335
 Publ. Date 66 8p.
 Hiskey, Marshall S.
A Summary Report on the Revision and Restandardization of the Hiskey-Nebraska Test of Learning Aptitude.
 Nebraska University, Lincoln, Educational Psychology Clinic
 Vocational Rehabilitation Administration (DHEW), Washington, D. C.
 EDRS mf,hc
 VRA-RD1173-S

Descriptors: exceptional child research; aurally handicapped; tests; deaf; aptitude tests; intelligence tests; individual tests; test reliability; test validity; Hiskey Nebraska Test of Learning Aptitude; HNTLA

The revision of the Hiskey-Nebraska Test of Learning Aptitude (H-NTLA) was undertaken to modernize the test materials, to extend the test, and to provide up to date norms on deaf subjects and hearing subjects. The items considered for the revision were administered to normal hearing, deaf, and retarded subjects aged 3 to 17 years. Following the analysis, the retained items were grouped into 12 power subtests. Final samples contained 1,079 deaf children, mostly from schools for the deaf, and 1,074 hearing children, selected on the basis of parental occupation, over a 10-state area. Information is provided concerning normative, reliability, and validity data, and the performances of deaf and hearing children on other tests and on the H-NTLA. (MK)

ABSTRACT 11190

EC 01 1190 ED 027 679
 Publ. Date Feb 69 18p.
 Fricke, James E.
A Study of Current Practices in Education for Hard-of-Hearing Children. Interim Report.
 American Speech And Hearing Association, Washington, D. C., Joint Committee On Audiology And Education Of The Deaf
 Office Of Education (DHEW), Washington, D. C., Bureau Of Research
 EDRS mf,hc
 OEG-0-8-071039-0188(032)
 BR-7-1039

Descriptors: exceptional child research; aurally handicapped; educational programs; identification; hard of hearing; testing programs; state departments of education; school districts; private schools; public schools; hearing clinics; incidence; standards; auditory evaluation; referral; professional personnel; statistical surveys

To gather information about case findings and special educational services for hard of hearing children, questionnaires were sent to state departments of education and of health, to an approximate 10% random sample of local school districts serving 600 or more students, to all known public and private facilities for the deaf, and to speech and hearing

centers. State departments of education and health reported on types of hearing services required by laws, and qualifications of testing personnel, and 15 estimated the number of hearing impaired children in their states. Local school districts, divided into six groups according to student population, provided information on hearing testing services, method of provision (directly or through other facilities), educational services, and kinds of facilities providing educational services. Schools for the deaf indicated number of students enrolled, degree of hearing impairment, reasons for referral of hard of hearing students, and number and kinds of classes. Types of hearing testing services, kinds of programs for hard of hearing students, types of staff persons who usually perform services, and availability of other programs for children who complete the center program are described for speech and hearing centers. (RP)

ABSTRACT 11227

EC 01 1227 ED 002 887
 Publ. Date 60 35p.
 Keys, John W. And Others
Effects and Interactions of Auditory and Visual Cues in Oral Communication.
 Oklahoma University, Norman, Research Institution
 Office Of Education (DHEW), Washington, D. C.
 EDRS mf,hc
 OEC-SAE-8277 CRP-499

Descriptors: exceptional child research; communication (thought transfer); perception; aurally handicapped; oral communication; audiovisual aids; auditory discrimination; lipreading; speech skills; sensory experience; auditory visual tests; auditory perception; visual perception; multisensory learning; hearing loss; audiovisual instruction

Visual and auditory cues were tested, separately and jointly, to determine the degree of their contribution to improving overall speech skills of the aurally handicapped. Eight sound intensity levels (from 6 to 15 decibels) were used in presenting phonetically balanced word lists and multiple choice intelligibility lists to a sample of 24 subjects. The subjects were divided equally into three groups: those with normal hearing, those with relatively flat hearing loss, and those with dropping or sloping hearing loss. Scores, consisting of the number of correct responses, were obtained with auditory and visual cues, alone and through an interaction of both as a function of discrete intensity increase. Analysis of the various effects and interactions was conducted through the use of variance techniques. The ability to interpret correctly spoken language with the bisensory approach greatly exceeded that yielded by either audition or vision in isolation. Future attempts to rehabilitate an individual whose hearing is impaired through lipreading instruction and auditory training should thus combine these two types

of training into a single instructional program. (JH)

ABSTRACT 11264

EC 01 1264 ED N.A.
 Publ. Date Sep 65 23p.
 Craig, Helen B.
A Sociometric Investigation of the Self-Concept of the Deaf Child.
 EDRS not available
 American Annals Of The Deaf; V110
 N4 P456-78 Sept 1965

Descriptors: exceptional child research; aurally handicapped; adjustment (to environment); personality; tests; deaf; self concept; self image; environmental influences; self esteem; self evaluation; peer relationship; test results; sociometric techniques; personality assessment

A study, to determine whether the deaf child's self concept is different from that of the normally hearing child, used 48 subjects from three school populations: an institutional school for the deaf, a day school for the deaf, and a normal public school. A perceptual sociometric test, which compared predicted sociometric ratings with actual ratings to give an index of perceived self, was administered to obtain measurement of self accuracy, self direction, self acceptance, and social expansiveness. Results indicated that deaf groups were significantly lower (p less than .05) than the hearing group in self accuracy, and confirmed the hypothesis that language is essential to the development of self concept. The institutionalized deaf rated themselves higher in self acceptance than the other two groups; there was no significant difference among groups in self direction. Social expansiveness was lowest in the deaf non-institutionalized group and highest in the deaf institutionalized group. It was suggested that the high self acceptance of institutionalized deaf may be a function of their protective environment and that self concept among the deaf might be improved by revising deaf education to broaden language ability and to promote a wider range of experiences. (SN)

ABSTRACT 11272

EC 01 1272 ED N.A.
 Publ. Date Mar 68 214p.
 Pickett, J. M., Ed.
Proceedings of the Conference on Speech-Analyzing Aids for the Deaf (Gallaudet College, Washington, D.C., June 14-17, 1967).
 Gallaudet College, Washington, D. C., Graduate School
 EDRS not available
 American Annals Of The Deaf; V113
 N2 P116-330 Mar 1968

Descriptors: exceptional child research; aurally handicapped; speech handicapped; conference reports; deaf; hard of hearing; speech; automation; speech therapy; programed instruction; auditory discrimination; sensory aids; hearing aids; electromechanical aids; hearing loss; speech pathology; visible speech; lipreading; auditory tests

Twenty-three conference papers and two discussions explore current work in speech science, phonetics, and automated training. Technical aids for training children, visual aids for speech correction, and correction of voice pitch in severely hard of hearing children are considered. Papers on speech-analyzing aids treat the Bell Translator, eyeglass speech reading, the voice visualizer, the Arthur D. Little phoneme analyzer, an experimental visual speech trainer, an instrument that creates artificial speech spectra, a frequency shift hearing aid, and visual and vibrotactile aids. Other studies explore monosyllabic production by deaf and dysarthric speakers, fundamentals of speech analysis and synthesis hearing capacity, measurement and calculation, synthetic speech in aural rehabilitation, programmed instruction, discrimination, frequency transposition, residual hearing, and auditory recoding. (JB)

ABSTRACT 11349

EC 01 1349 ED N.A.
Publ. Date Mar 68 10p.
Vernon, McCay
Current Etiological Factors in Deafness.
Michael Reese Hospital And Medical Center, Chicago, Illinois, Institute For Psychosomatic And Psychiatric Research And Training
Social And Rehabilitation Service (DHEW), Washington, D. C.
EDRS not available
RD-2407-S
American Annals Of The Deaf; V113 N2 P196-15 Mar 1968

Descriptors: exceptional child research; aurally handicapped; etiology; deaf; hearing loss; premature infants; heredity; infectious diseases; rubella; incidence; age differences; hard of hearing; teaching methods

Causes of 1,468 cases of deafness with a hearing loss greater than 65 decibels were investigated. The leading causes of deafness were found to be heredity, prematurity, meningitis, maternal rubella, and the Rh factor; and since four of the five leading causes are also major etiological factors in brain damage, neurophysiological residual might explain many of the learning and behavioral handicaps present in deaf youth. In 30.4% of the cases the cause was unknown, and in 32.3% another or dubious valid etiology was given. The high prevalence of premature birth (17.5%) was triple the expected figure. The present school age population was found to be about 5% post-lingually deaf in contrast to 40% in years past. However, the percentage of cases of unknown or nebulously determined causes of deafness was too high (over one-third) to permit an effective prevention program. (JB)

ABSTRACT 11434

EC 01 1434 ED N.A.
Publ. Date Mar 69 12p.
Ling, Daniel; Doehring, Donald G.

Learning Limits of Deaf Children for Coded Speech.

EDRS not available
Journal Of Speech And Hearing Research; V12 N1 P83-94 Mar 1969

Descriptors: exceptional child research; aurally handicapped; discrimination learning; programed instruction; deaf; auditory training; auditory discrimination; coded speech

Programed instruction was used to train profoundly deaf subjects to crude limits of learning in the association of pictures and spoken words. The words differed only in consonant structure. The performance of three groups of six subjects was compared. One group received linearly amplified speech to both ears; another, coded speech to both ears; and the third, linearly amplified speech to the left ear and coded speech to the right. A control group of six children was trained without auditory cues. The three experimental groups showed significant improvement with training, but there was no significant difference between groups with respect to either performance at the limits of learning or number of repetitions required to reach the limits. Transposition of speech through coding did not improve the discrimination of consonants by the deaf children tested. (Author)

ABSTRACT 11437

EC 01 1437 ED N.A.
Publ. Date Mar 69 8p.
Doehring, Donald G.; Rosenstein, Joseph
Speed of Visual Perception in Deaf Children.
EDRS not available
Journal Of Speech And Hearing Research; V12 N1 P118-25 Mar 1969

Descriptors: exceptional child research; aurally handicapped; visual perception; deaf; testing; visual stimuli; sight vocabulary; intelligence level; age differences; time factors (learning)

A test of visual perceptual speech was administered to 50 deaf and 50 hearing children equated in age, sex, and Performance IQ. The test included 13 subtests varying in stimulus complexity and verbal content. In each subtest the subject was required to identify and underline the correct stimulus, which was interspersed among similar stimuli, as rapidly as possible. The hearing children scored significantly higher on 9 of the 13 subtests; older children scored significantly higher on all subtests; and there was a significant interaction between age and hearing status on only one subject. Correlations between subtest scores, reading vocabulary, and Performance IQ were also calculated. The results were discussed in terms of the specific task requirements of the visual perceptual speed tests. It was concluded that deficits of visual perception in deaf children should be interpreted in relation to age, education, language development, and reading achievement of the populations studied. (Author)

ABSTRACT 11519

EC 01 1519 ED 029 419
Publ. Date Jul 68 33p.
Lowell, Edgar L.

Home Teaching for Parents of Young Deaf Children. Final Report.

John Tracy Clinic, Los Angeles, California
Office Of Education (DHEW), Washington, D. C., Bureau Of Education For The Handicapped
EDRS mf, hc
OEG-32-14-0000-1014
BR-5-0362

Descriptors: exceptional child research; aurally handicapped; parent education; teaching methods; program evaluation; preschool children; deaf; language instruction; rating scales; tutoring; parent attitudes; language development; speech clinics; Boone Infant Speech and Language Development Scale; John Tracy Clinic

To explore and evaluate the feasibility of providing language instruction to parents of young deaf children in a home-like environment, a demonstration home was established at a clinic. Parents were invited to attend weekly meetings which were reduced to 1/2 hour in length during the course of the project. Parents could bring other siblings, family members, and materials from their own home. A single tutor worked with each family in separate rooms in language building activities. Fifty-two families who visited the demonstration home for 10 weekly visits were compared with 25 families who were enrolled in the John Tracy Clinic traditional service program. Language development in the children was assessed with the Boone Scale and changes in the parents' information and attitudes were assessed by scales previously developed at the Clinic. The language scales were too unreliable to be satisfactory, but all showed substantial gains for the demonstration home children. The parent information scores showed that the demonstration home parents did slightly better than the control group of parents. There was no change in the parent attitude scales. Experience with the program was judged so satisfactory by the staff of John Tracy Clinic that the program is being continued as a Clinic function after the expiration of federal grant and has been extended to two similar branch programs. (RJ)

ABSTRACT 11539

EC 01 1539 ED 029 441
Publ. Date Dec 65 280p.
Stewart, Joseph L.
Effectiveness of Educational Audiology on the Language Development of Hearing Handicapped Children. Final Report.
Denver University, Colorado
Office Of Education (DHEW), Washington, D. C.
EDRS mf, hc
OEC-SA E-8966 CRP-969
BR-5-0377

Descriptors: exceptional child research; aurally handicapped; preschool children; auditory training; testing; hearing aids; parent counseling; multisensory learning; language development; articulation (speech); nursery schools; hard of hearing; program evaluation; parent participation; speech skills; group therapy; preschool programs

Two groups of hard of hearing children entered educational audiology programs between the ages of 6 to 42 months. Of these, 12 children in a unisensory program (U-) and 16 in a multisensory program (M-) were evaluated for speech and language development after they had reached their fifth birthdays. Children in the experimental U-group were first tested for hearing and fitted with an aid, then were given auditory training at home and group therapy sessions. At age 3, they were evaluated for placement in an enriched nursery school program, which also trained them primarily through the auditory sense. Guidance and psychological counseling were provided for the parents. Results indicated that the U-group was markedly superior on all measures of speech and language acquisition, although less so on the Templin-Darley articulation test. On all other measures (mean length of responses, mean of five longest responses, number of one-word responses, number of different words, and structural complexity score), results for the U-group appeared to indicate the advisability of unisensory management. Findings suggested that U-management may be of most benefit to children whose residual hearing extends into the high frequencies and whose hearing losses are relatively flat. (JD)

ABSTRACT 11553

EC 01 1553 ED N.A.
Publ. Date Jan 67 10p.
Vernon, McCay

Prematurity and Deafness: The Magnitude and Nature of the Problem Among Deaf Children.

EDRS not available
Exceptional Children; V33 N5 P289-98
Jan 1967

Descriptors: exceptional child research; aurally handicapped; hearing loss; premature infants; hard of hearing; deaf; multiply handicapped; etiology; intelligence; academic achievement; minimally brain injured; neurological defects; audiometric tests; emotional adjustment; Bender Gestalt Test; Diagnostic Screening Form for Detection of Neurological Impairment in Deaf Children

To investigate the relationship between prematurity and deafness, 1,468 deaf or profoundly hard of hearing children (ages 3 to 21 years) were studied. Of these, 257 children had a birth weight of 5 pounds, 8 ounces, or less, and prematurity was the only known cause in 175 of the 257 cases. As birth weight dropped, IQ diminished appreciably (below 3 pounds, 4 ounces, the mean IQ

was below 80). Data based on the Stanford Achievement Test scores, school records, and teacher evaluations indicated that these children achieved at half the rate of normally hearing children and two thirds the rate of deaf children of deaf parents. One out of every five of the 175 was essentially unable to be educated. Psychological evaluations, teacher ratings, and school records revealed that one-fourth to one-third of the subjects had severe emotional problems; the Bender Gestalt Test, the screening for the detection of neurological impairment, and audiograms indicated the presence of brain damage. The lower the birth weight, the greater the incidence of multiple handicaps (over two-thirds of premature deaf children were multiply handicapped) and the more serious the handicap. (AJ)

ABSTRACT 11699

EC 01 1699 ED 030 254
Publ. Date Dec 68 57p.
Restaino, Lillian C. R.

Identification, Assessment and Prediction of Reading Competency in Deaf Children. Final Report.

Lexington School For The Deaf, New York, New York
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf, hc
OEG-32-42-0000-6032
BR-6-1203

Descriptors: exceptional child research; aurally handicapped; reading ability; reading skills; reading difficulty; abstraction levels; memory; visual discrimination; serial ordering; linguistic competence; tests; visual perception; cognitive processes

To investigate the underlying factors of visual discrimination, memory, rule abstraction, language, and serial ordering in reading success, 79 poor and 65 good deaf readers were administered a battery of tests. Poor readers were deficient in lower-order visual discrimination and memory abilities; higher-order visual discrimination skills were important to success for good readers. Higher-order rule abstraction skills were important for continued progress by the relatively successful readers; however, lower-order rule abstraction was important to successful visual discrimination at initial levels of reading for poor readers as well. Successful rule abstraction was significant at all levels of reading; and visual discrimination (visual search and sequencing) was significant to the advanced reader for the processing of higher-level printed text. Implications were that rule abstraction is important at all levels of the reading process, visual discrimination activities at prereading and higher reading levels should be re-evaluated, and investigation is needed to determine sentence structures that are obstacles to progress beyond intermediate levels of reading. (Author/RJ)

ABSTRACT 11747

EC 01 1747 ED N.A.
Publ. Date Mar 69 4p.
Harrelson, Orvis A. And Others
Comparison of Hearing Screening Methods.
EDRS not available
Journal Of School Health; V39 N3
P161-4 Mar 1969

Descriptors: exceptional child research; aurally handicapped; screening tests; auditory tests; audiometric tests; testing

Data were collected on 603 pupils in grades kindergarten, 1, 2, 3, and 6 for the purpose of comparing proficiency, personnel, and cost factors of three methods of school hearing screening: individual pure tone sweep tests (25 decibels ISO); group pure tone tests; and individual three-tone sweep checks (1,000, 2,000, 4,000 cps at 25 decibels ISO). Results indicated that the three-tone screening method was significantly (.001 level) superior to the other two methods in detecting hearing referrals. Single tone failure was a practical criterion in three-tone testing and was less practical for individual and group screening. The group testing procedure was inferior to the other two in detecting hearing loss and was most costly. Performance of the three-tone technique required least time per pupil, and reliability, cost, ease of handling, and screener preference favored this method. (JB)

ABSTRACT 12043

EC 01 2043 ED N.A.
Publ. Date Sep 69 23p.
Vernon, McCay

Sociological and Psychological Factors Associated with Hearing Loss.

EDRS not available
Journal Of Speech And Hearing Research; V12 N3 P541-63 Sept 1969
Paper Presented At Institute For Aural Rehabilitation (Denver, Colorado, July 1968).

Descriptors: exceptional child research; aurally handicapped; psychological characteristics; social factors; academic achievement; intelligence; communication skills; mental illness; research reviews (publications); employment patterns

Research reviews presented in the following areas reveal these results: the hearing impaired have essentially the same IQ distribution as the general population; the average deaf adult is grossly undereducated; the deaf frequently enter manual labor because of lack of opportunity to engage in appropriate higher level employment; 95% of the deaf marry other deaf persons; deaf adults have formed strong organizations to meet their needs; the deaf are not forced into a hearing or a deaf world but participate in both; impulse control problems and related syndromes are more common among the deaf and there is frequent lack of insight; the major handicap of deafness is impairment of communication; and employment trends suggest a vocational crisis for the deaf

which indicates a need for more educational opportunities and aural rehabilitation. (RJ)

ABSTRACT 20287

EC 02 0287 ED N.A.
 Publ. Date May 69 7p.
 Neuhaus, Maury
Parental Attitudes and the Emotional Adjustment of Deaf Children.
 EDRS not available
 Exceptional Children; V35 N9 P721-7
 May 1969

Descriptors: exceptional child research; aurally handicapped; deaf; parent attitudes; emotional adjustment; adolescents; mother attitudes; parent child relationship; fathers

The parents of 84 deaf children of three age levels (3 to 7, 8 to 12, and 13 to 19) were administered the University of Southern California Parent Attitude Survey and the Attitude Toward Disabled Persons Scale to assess their attitudes toward children and toward disability. Teachers used the Haggerty-Olson-Wickman Behavior Rating Schedules to rate the children's emotional adjustment at school. Results indicated that there is a significant relationship between maternal and paternal attitudes toward children and the child's emotional adjustment at all three age levels, with one exception: the fathers' attitudes toward children between ages 3 to 7. Where parental attitudes differed, the maternal attitude outweighed the paternal attitude in its effect upon the child's emotional adjustment. No significant relationship was found between parental attitudes toward disability and the child's emotional adjustment. Parental attitudes toward children did not vary with the age of the child, while parental attitudes toward disability did. Parents of deaf children were more accepting of disability when their children were young. (Author/LE)

ABSTRACT 20344

EC 02 0344 ED N.A.
 Publ. Date Jul 69 10p.
 Quigley, Stephen P.
Higher Education for Deaf Persons in Regular Institutions.
 EDRS not available
 Journal Of Rehabilitation Of The Deaf; V3 N1 P34-43 Jul 1969

Descriptors: exceptional child research; aurally handicapped; college attendance; questionnaires; socioeconomic status; educational background; counseling services

To determine whether deaf persons were successful in attending regular colleges, 5 groups of the deaf (in alphabetical order, those with a B.A., those without, those in attendance at the time of the study, those who began in regular colleges but transferred to Gallaudet, and Gallaudet graduates who attended graduate school in regular institutions) were sent questionnaires. The major results based on 653 acceptable returns were as

follows: groups A and E were generally as successful as the general college educated population, but group E came from a lower socio-economic status and attended combined residential schools rather than oral; groups B and D had lower grades throughout their educational career; and group C, being younger, reflected the emphasis of the past 20 years and showed the tendency to use hearing aids; they also received more home training. Conclusions and implications are that those who did not complete the college course were those who were perhaps not as academically capable, that counseling is needed regarding facilities and colleges available, and that attention should be given to those with moderate hearing impairments. (JM)

ABSTRACT 20505

EC 02 0505 ED N.A.
 Publ. Date Aug 66 8p.
 Rush, Mary Lou
Use of Visual Memory in Teaching Written Language Skills to Deaf Children.
 EDRS not available
 Journal Of Speech And Hearing Disorders; V31 N3 P219-26 Aug 1966

Descriptors: exceptional child research; aurally handicapped; language skills; written language; writing skills; programed instruction; retention; programed materials; positive reinforcement; testing; language handicapped

The use of programed material in teaching written intermediate language to deaf children was investigated. Subjects were 38 residential school students, aged 11 to 17 years, with IQ's ranging from 58 to 124 on the Leiter International Performance Scale. The program consisted of 219 frames requiring a total of about 2 hours. The frames were designed to teach such written language as destinations (house, to school, upstairs), various familiar verbs and verb endings (going, walking, to be, is/are), and the definite article (the) with gradually increasing recall necessary. The posttest mean was significantly above the pretest mean (.01 level). Kind and frequency of errors followed the same order on both tests. Retesting of some students at 2 and 4 weeks after the posttest showed no difference in means. Retesting of 12 other students at 10 weeks showed a significant (t equals 2.45) difference in means; however, the mean of retention scores remained significantly above the mean of pretest scores. Indications were that training in short term memory, programed instruction, and positive reinforcement can aid in establishing memory traces for language acquisition. (JM)

ABSTRACT 20579

EC 02 0579 ED N.A.
 Publ. Date 66 37p.
 Kohl, Herbert R.
Language and Education of the Deaf. Policy Study Series.
 Center For Urban Education, New York, New York

EDRS not available
 CUE-PSS-NO-1

Center For Urban Education, 105 Madison Avenue, New York, New York 10016.

Descriptors: exceptional child research; aurally handicapped; communication (thought transfer); deaf; educational needs; social discrimination; social immaturity; educational methods; language ability; sign language; language instruction; language research; research needs; concept formation; manual communication; educational background; employment level

In a description of the education and achievement of profoundly deaf individuals in contemporary American society, the attitudes of society toward the deaf and the subsequent social problems deaf children face are defined. Statistics are presented on deaf school drop-outs and graduates; types of communication used (oral signs), occupational level, and weekly income, and the emotional characteristics of the deaf are discussed. Also treated are the four methods of education of deaf children in the United States (pure oral method, oral method, natural language method, Rochester method), and their failure to achieve oral language communication among students, and sign language, the means of communication used by the deaf community. Two studies designed to analyze the various components of sign language are reported. Finally, research in language and concept formation is reviewed in answer to two questions: what is the language of the deaf like and what is the relationship of oral language to concept formation and thinking and to performance on tests of concept formation. Suggestions are made for further research. (RS)

ABSTRACT 20590

EC 02 0590 ED N.A.
 Publ. Date 65 40p.
 Rosenstein, Joseph, Ed.; MacGinitie, Walter H., Ed.
Research Studies on the Psycholinguistic Behavior of Deaf Children.
 Council For Exceptional Children, Washington, D. C.
 EDRS not available
 Council For Exceptional Children, 1499 Jefferson Davis Highway, Suite 900, Arlington, Virginia 22202 (\$2.00).

Descriptors: exceptional child research; language; aurally handicapped; tests; deaf; language development; written language; language patterns; language learning levels; language research; language tests; vocabulary; psycholinguistics; Van Alstyné Picture Vocabulary Test; Peabody Picture Test; Ammons

Full Range Picture Tests; Kent Rosanoff Word Association Test; Lexington School for the Deaf

This monograph presents four research projects carried out at the Lexington School for the Deaf to study language development of the deaf child. The

following are included: a study of the development of morphological habits in deaf children which indicated that the development of morphological habits in the deaf child parallels that of the hearing child but is slower chronologically; an analysis of three picture vocabulary tests for use with the deaf--the Van Alstyne Picture Vocabulary Test, the Peabody Picture Test, and Ammons Full-Range Picture Tests, which showed that, in a modified form, all three can be used successfully with deaf children; word associations of deaf children, a study based on the 100-word Kent-Rosanoff Word Association Test, in which results indicated that the young deaf children's responses resembled those of hearing adults, suggesting that the primary source of their language learning was their teachers; and an investigation of redundancy in the written language of the deaf in which results indicated that hearing subjects are better able to reconstruct sentences than are the deaf. References follow each paper and a discussion of all four papers is presented. (F1.)

ABSTRACT 20733

EC 02 0733 ED N.A.
Publ. Date Nov 69 6p.
Rudloff, Joseph S.

Descriptive Profile of Teachers of Exceptional and Non-Exceptional Children with Implications for Recruitment.

EDRS not available
Journal Of Educational Research: V63
N3 P130-5 Nov 1969

Descriptors: exceptional child research; teacher characteristics; teacher qualifications; teacher experience; teacher recruitment; teaching experience; aurally handicapped; interest research; standards; vocational interest

To develop and examine a descriptive profile of teachers of hearing handicapped children and teachers in regular classrooms. 274 teachers of the exceptional child and 274 teachers of the nonexceptional child completed the Teacher Preference Schedule and Strong Vocational Interest Blank. The completed data were matched on the basis of sex, grade level, and population classification of the school community. The descriptive profile indicated features which significantly differentiate the teacher of the hearing handicapped. The two groups differed on certain aspects of professional qualifications, and differed in contact experience with the exceptional child they teach; teachers of exceptional children were not more child-centered in their unconscious motivation to teach; and they had a higher degree of social service interest than teachers of nonexceptional children. The findings suggest the need for clarifying the characteristics of individuals engaged in the various teaching specialties in order to recruit qualified teachers more realistically. (WW)

ABSTRACT 20738

EC 02 0738 ED N.A.
Publ. Date 69 7p.
Kates, Solis S.
Learning and Use of Logical Symbols by Deaf and Hearing Subjects.
EDRS not available
Journal Of Abnormal Psychology: V74
N6 P699-705 1969

Descriptors: exceptional child research; aurally handicapped; learning processes; logical thinking; cognitive processes; abstract reasoning; verbal ability; written language; socioeconomic status; intelligence; testing; concept formation

To discover the ability of the deaf to learn and use logical concepts, 16 deaf students and 32 hearing students (all aged 11 to 17 years) were matched and tested. The deaf were equal to the hearing group (matched on age, IQ, and socioeconomic background) in ability to learn and use logical concepts. They were superior in learning these concepts to a hearing group matched on written language comprehension, socioeconomic background, and IQ. Age rather than written language capacity appeared more vital for verbal description of logical concepts for both deaf and hearing, indicating that experience and skill development in certain mental operations must precede the descriptive ability for logical expression. The conclusion was that, if carefully matched, the deaf and hearing show similar capacity for learning and using logical concepts. (JM)

ABSTRACT 20819

EC 02 0819 ED 032 685
Publ. Date Mar 69 243p.
Adler, Edna P., Ed.
Journal of Rehabilitation of the Deaf: Deafness, Research and Professional Training Programs on Deafness Sponsored by the Department of Health, Education, and Welfare.
Professional Rehabilitation Workers With The Adult Deaf, Knoxville, Tennessee
Social And Rehabilitation Service (DHEW), Washington, D. C.
EDRS mf, hc

Descriptors: exceptional child research; aurally handicapped; research projects; professional training; federal aid; deaf; demonstration projects; grants; instructional materials; professional education; teacher education; research directors; agencies; medical research; deaf blind; audition (physiology); rehabilitation programs; directories; Department of Health, Education, and Welfare

Research and professional training programs on deafness sponsored by the Department of Health, Education, and Welfare are introduced and detailed in chart form. The programs are listed according to the Department agencies responsible, including the following divisions of the Social and Rehabilitation Service: the Rehabilitation Services Administration, the Center for Research

and Advanced Training in Deafness, the International Program, and the Children's Bureau. Also listed are the programs of the Bureau of Education for the Handicapped within the U.S. Office of Education and of the National Institute of Neurological Diseases and Blindness. (JD)

ABSTRACT 20837

EC 02 0837 ED 032 705
Publ. Date 31 Dec 67 100p.
Lawrence, Clifford A.; Vescovi, Geno M.
Deaf Adults in New England: An Exploratory Service Program.
Morgan Memorial, Inc., Boston, Massachusetts
Social And Rehabilitation Service (DHEW), Washington, D. C.
EDRS mf, hc

Descriptors: exceptional child research; aurally handicapped; vocational rehabilitation; program evaluation; vocational counseling; program development; staff role; social services; psychological evaluation; testing; occupational tests; ancillary services; academic achievement; language skills; communication skills; individual characteristics

To provide deaf adults with services they had not previously received and to demonstrate the efficacy of providing these services in a setting with hearing clients, the Deaf Adult Project was developed. During 1965, 10 clients were served; staff members were recruited and added during the next two years; and over a 3-year period 194 clients were referred and 126 were served. The core service was rehabilitation counseling; other services included psychological and psychiatric evaluation and testing, social work services, and ancillary services. The majority of the 126 clients were young; 51.6% were between 15 and 24 years of age; males outnumbered females 87 to 39; 73.81% were prelingually deafened; and illiteracy represented the most frequent vocational handicap with 46.8% of the 126 clients unable to read at the fourth grade level. Seventy-seven clients were either employed or in academic or vocational programs after leaving the project. Conclusions were as follows: there is a continuing need for services for deaf adults; there was a direct relationship between availability of staff and the ability to develop a caseload and provide services; lack of staff hampered stimulation of referrals; there was a major failing of educational methods with the clients, many of whom were normal or above in intelligence; and more services were needed. Implications for the future and recommendations are reported. (R.)

ABSTRACT 20890

EC 02 0890 ED 012 128
Publ. Date Apr 67 85p.
Justman, Joseph; Moskowitz, Sue
A Follow-Up Study of Graduates of the School for the Deaf.

New York City Board Of Education, New York, Education Research Bureau EDRS mf,hc
BER NO. 42
Studies Of Children With Physical Handicaps, No. 7.

Descriptors: exceptional child research; adjustment (to environment); aurally handicapped; hard of hearing; deaf; hearing aids; junior high schools; social relations; student records; followup studies; graduates; family background; leisure time activities; employment patterns; lipreading; questionnaires; communication skills; hearing loss

A questionnaire of 129 items (mostly multiple choice or short answer) was sent to former students who were graduated between 1908 and 1958 from the School for the Deaf (Junior High School 47 in Manhattan) in New York City. The questionnaire gathered information on family background, school history, occupation, hearing and speech, leisure time activities, and social relationships. Responses were received from 646 graduates. Results indicated that the average graduate had an adequate job, liked his job, had both deaf and hearing friends and fellow employees, had improved in speech and lipreading, communicates with others, and liked leisure time activities similar to those of hearing people. Recent graduates appeared to be better adjusted than older graduates. Seventy tables present data. (MY)

ABSTRACT 20915

EC 02 0915 ED 020 608
Publ. Date 67 543p.
Graham, A. Bruce, Ed.
Sensorineural Hearing Processes and Disorders, Henry Ford Hospital International Symposium, Michigan, (March 25-27, 1965).
EDRS not available
Little, Brown And Company, 34 Beacon Street, Boston, Massachusetts 02016 (\$19.00).

Descriptors: exceptional child research; aurally handicapped; identification; audition (physiology); etiology; auditory perception; psychoacoustics; auditory evaluation; auditory discrimination; audiometric tests; hearing loss; clinical diagnosis; deaf; hard of hearing; evaluation techniques; aural stimuli; ears; neurological defects; perceptually handicapped; hearing loss; pathology; diseases; conference reports

In order to provide both clinician and investigator with a better understanding of the problems, causes, identification, and handling of sensorineural hearing losses, the Henry Ford Hospital invited investigators in psychoacoustics, otology, otoneurology, physiology, and audiology to share their research and clinical findings. The resulting 40 papers were presented at a symposium held in March 1965. Groups of five to eight papers treat the following areas: processes of sensorineural hearing mechanisms, psychoacoustic response to auditory stimuli,

li, localization of auditory disorders (clinical manifestations), clinical diagnostic procedures, pathology and manifestations of specific disease entities, and symposium summaries. Most papers provide their own reference lists, and many contain tables, figures, or photographs. A list of symposium participants is given. (JD)

ABSTRACT 20962

EC 02 0962 ED 033 502
Publ. Date 69 86p.
Bell, Alexander Graham
Memoir: Upon the Formation of a Deaf Variety of the Human Race.
Alexander Graham Bell Association For The Deaf, Inc., Washington, D. C.
EDRS not available
Alexander Graham Bell Association For The Deaf, Inc., 1537 35th St., N. W., Washington, D. C. 20007 (\$25.00).
Paper Presented To The National Academy Of Sciences (New Haven, Connecticut, November 13, 1883).

Descriptors: exceptional child research; aurally handicapped; heredity; marriage; incidence; family relationship; family background; marital status; statistical studies; social isolation; environmental influences; Alexander Graham Bell

A compilation of data on the hereditary aspects of deafness presented at a conference in 1883 by Alexander Graham Bell, the document contains records of familial occurrences of deafness and marriage statistics. Tables indicate that within schools for the deaf many students had the same family name; it was considered highly probable that a considerable proportion of deaf mutes belonged to families containing more than one such person. Of 5,823 deaf mutes from various parts of the county, 29.5% were known to have deaf and dumb relatives. Records from two institutions showed that about one half of the students born before 1840 had married; of 1,089 from five schools who had married, an increased proportion had married other deaf mutes. Indications were found that a hereditary tendency toward deafness, as indicated by the possession of deaf relatives, was a most important element in determining the production of deaf offspring, and that the proportion of deaf mute children born to deaf mutes was many times greater than the proportion born to the people at large. Additional information is provided and includes charts, graphs, and family trees. (RJ)

ABSTRACT 20973

EC 02 0973 ED 033 513
Publ. Date (68) 222p.
Griffing, Barry L.; Hayes, Gordon M.
Educational Amplification Response Study, E.A.R.S.
California State Department Of Education, Sacramento;
San Diego Speech And Hearing Center, California
Office Of Education (DHEW), Washington, D. C.

EDRS mf,hc

Descriptors: exceptional child research; aurally handicapped; audio equipment; equipment evaluation; electronic equipment; loop induction systems; acoustics; quality control; teacher attitudes; hearing aids; microphones

To obtain an overall view of the auditory training equipment used in California, 27 different models of nine makes of auditory training systems were subjected to an acoustical, quality control, and educational analysis. The test methods used were those of the hearing aid industry. An analysis of questionnaires sent to teachers, speeches by Hyman Goldberg and Richard S. Campbell on amplification systems, definitions used, and procedures followed are provided. Physical descriptions and assessments of quality, performance, and educational suitability are given for each piece of equipment. Recommendations include suggestions that the industry work more closely with schools in designing systems and equipping classes, and that studies should be made at 3-year intervals to assure continuing improvements in educational amplification equipment. Appendixes include the educational questionnaire, a harmonic distortion guide, and a list of the manufacturers. (JM)

ABSTRACT 20974

EC 02 0974 ED 033 514
Publ. Date 69 59p.
Rosenstein, Joseph, Ed.; MacGinitie, Walter H., Ed.

Verbal Behavior of the Deaf Child: Studies of Word Meanings and Associations. TC Series in Special Education.

EDRS not available
Teachers College Press, Columbia University, 525 West 120 The Street, New York, New York 10027.

Descriptors: exceptional child research; aurally handicapped; language ability; associative learning; age differences; word recognition; testing; vocabulary skills; association (psychological); paired associate learning

Results are reported of five studies of word meanings and associations of the deaf child. Subjects from two oral schools for the deaf and a group of normally hearing students were given a word association test. The generally higher same form class responses of subjects from oral school B were thought to reflect their language instruction which emphasized grammatical structure. On a continuous association task, deaf children performed relatively well compared to a standard for hearing children in grade 7. On a test of written meanings, results revealed that deaf children used more associations in defining than hearing children, and they gave fewer adequate definitions. Another investigation showed that the two groups of deaf children were less able than the

hearing to identify synonyms and associations correctly. In a study of alternative word meanings, the item context had essentially no effect on the performance of deaf subjects while the performance of hearing subjects was depressed by misleading contexts. The overall results showed the deaf to be deficient in verbal association in comparison to the hearing and showed a lack of improvement with age in the deaf groups. It was suggested that verbal achievement and behavior patterns of the deaf be studied without continuous comparison with the hearing. (RJ)

ABSTRACT 20983

EC 02 0983 ED 003 523
 Publ. Date Sep 69 50p.
Academic Achievement Test Performance of Hearing Impaired Students, United States: Spring 1969. Data from the Annual Survey of Hearing Impaired Children and Youth.
 Gallaudet College, Washington, D. C., Office Of Demographic Studies
 Office Of Education (DHEW), Washington, D. C.
 EDRS mf, hc

Descriptors: exceptional child research; aurally handicapped; academic achievement; national surveys; statistical data; test validity; test reliability; age differences; deaf; hard of hearing; achievement tests; Stanford Achievement Tests

The objectives of the annual survey of hearing impaired children and youth which are presented are to collect, process, and disseminate statistical information on characteristics of all hearing impaired individuals through college age. One aspect of this work is described through results of the administration of the Stanford Achievement Tests (Form W) to about 12,000 hearing impaired children from 70 schools and 39 classes. a description of the tests, the methodology and sources of the data, and the qualifications and limitations of the data are included. Also provided are detailed tables of the results of the test batteries and a description of these tables. It was noted that the test results should be considered limited because the Stanford Achievement Tests were developed for hearing students. Appendixes include an annual census form, a description of the sub-tests of the Wechsler, and a list of participating schools. (JM)

ABSTRACT 21003

EC 02 1003 ED N.A.
 Publ. Date 66 260p.
 Gaeth, John H.
Verbal and Nonverbal Learning in Children Including Those with Hearing Losses. Part II.
 Wayne State University, Detroit, Michigan
 Office Of Education (DHEW), Washington, D. C.
 EDRS not available
 OEC-SAE-OE-4-10-033
 John H. Gaeth, Wayne State University, 4841 Cass Street, Detroit, Michigan 48202.

Descriptors: exceptional child research; aurally handicapped; verbal learning; learning characteristics; visual stimuli; verbal stimuli; response mode; paired associate learning

The author's two previous investigations of verbal learning in both normal and hearing-handicapped children led to conclusions that combined audio-visual presentation of material was not superior to unimodal presentation, and the child responds to the most meaningful single modality of a bimodal presentation. The present study carried this research further by exploring the variables which determine the child's unimodal response. Major goals were to define meaningfulness or the dimensions of meaningfulness in children, study the relationship of meaningfulness to sensory channels of presentation, and relate the findings to education and training of normal and hard-of-hearing children. Using a tape recorder and slide projector, over 9,000 normal and hard-of-hearing children were tested with a wide variety of materials. The two major types of experimentation used were recall of paired association tasks, and estimations of association value for materials used in paired-associate tasks. Details of the experiments conducted are given. Included are discussions relating results to previous studies, and summary discussions of all the experiments. Results appear to verify conclusions reached in the previous studies, and it was further concluded that meaningfulness determines which modality will get most attention in a bimodal situation, adult values are good indices of children's values, and caution should be used in interpreting items in terms of their absolute values, and meaningfulness is relative to the context in which the material to be learned is placed. (JD)

ABSTRACT 21154

EC 02 1154 ED N.A.
 Publ. Date 70 5p.
 Brown, Jerome; Arkebauer, Herbert J.
Using the Language Master with Hearing Impaired Children.
 EDRS not available
 Teaching Exceptional Children; V2 N2 P81-5 Win 1970

Descriptors: exceptional child research; aurally handicapped; instructional materials; teaching machines; audiovisual aids; programed instruction; self pacing machines; autoinstructional aids; language instruction; vocabulary development; Language Master

The use of the Language Master machine for vocabulary instruction with hearing impaired children was examined to compare its effectiveness with traditional teaching procedures. The results showed no significant differences in vocabulary gains between the two methods, but the authors suggested that the use of the Language Master provides the additional advantages of freeing the teacher from certain routine activities, and enabling the child to assume in-

creased independence and participation in the learning process. (RD)

ABSTRACT 21157

EC 02 1157 ED N.A.
 Publ. Date Jan 70 6p.
 Kloeppfer, H. Warner And Others
Genetic Aspects of Congenital Hearing Loss.
 EDRS not available
 American Annals Of The Deaf; V115 N1 P17-22 Jan 1970

Descriptors: exceptional child research; aurally handicapped; genetics; heredity; etiology; data collection; anomalies; surveys; hearing loss

A brief review of the knowledge of genetic origination of congenital hearing loss indicates that 46 to 60% of all cases of severe hearing loss are genetically determined. The major problem is that little progress has been made in identifying genotypes for hearing loss not associated with other anomalies. The need is discussed for every possible gene which causes hearing loss to be described and identified. A genetic study of hearing loss in Louisiana is reviewed, and a glossary of terminology included. (JM)

ABSTRACT 21164

EC 02 1164 ED N.A.
 Publ. Date Jan 70 7p.
 Fellendorf, George W.; Harrow, Icie
Parent Counseling 1961-1968.
 EDRS not available
 Volta Review; V72 N1 P51-7 Jan 1970

Descriptors: exceptional child research; aurally handicapped; parent attitudes; parent counseling; surveys; questionnaires; hearing clinics; specialists; physicians; identification

The results of questionnaires answered by parents of deaf children are presented examining the direction followed in detecting their children's loss, confirmation of their suspicions by professionals, and the number of medical or paramedical personnel contacted. Negative experiences are indicated by many parents, and a need for increased quality and availability of parent counseling services is emphasized. (Author/RD)

ABSTRACT 21221

EC 02 1221 ED 003 622
 Publ. Date Dec 63 84p.
 Birch, Jack W.; Stuckless, E. Ross
Programed Instruction and the Correction of Written Language of Adolescent Deaf Students.
 Pittsburgh University, Pennsylvania, School Of Education
 Office Of Education (DHEW), Washington, D. C.
 EDRS mf, hc
 OEG-7-48-1110-188
 NDEA-VIIA-978

Descriptors: exceptional child research; language; aurally handicapped; teaching methods; programed instruction; written

language; grammar; material development; adolescents; measurement techniques; conventional instruction; programmed materials; instructional technology; deaf; language skills; language usage; language instruction

Special programs for the deaf were developed to determine if grammatical errors in written language could be reduced. Preliminary analyses were made on the language of deaf students and used as a guide for the selection of grammar material to be programmed. One control group and two experimental groups were used in the study. The samples consisted of adolescent deaf students who were assigned to one of the three groups. The first experimental group consisted of 57 subjects, the second of 52, and the control group of 105 subjects. The two experimental groups received two different treatments, while the control group received representative instruction. The treatments were divided into deductive and inductive forms of programs. Programmed language instruction was demonstrably effective for teaching deaf students, particularly when coupled with conventional instruction and used skillfully. (JK)

ABSTRACT 21231

EC 02 1231 ED 003 310
Publ. Date May 64 66p.
Birch, Jack W.; Stuckless, E. Ross

The Relationship Between Early Manual Communication and Later Achievement of the Deaf.

Pittsburgh University, Pennsylvania, School Of Education
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-3-10-078 CRP-1769

Descriptors: exceptional child research; aurally handicapped; achievement; communication (thought transfer); language skills; psychoeducational processes; language tests; finger spelling; sign language; early experiences; skill development; speech skills; reading skills; writing skills; lipreading; personal adjustment; language development; social adjustment

An investigation was undertaken to determine whether early manual communication with deaf children influences their subsequent acquisition of intelligible speech, reading ability, speech reading ability, written language, and psychosocial adjustment. The design involved matched pairs of subjects because of the large number of variables which needed to be controlled. Early manual communication was the independent variable. One subject of each matched pair was a deaf child who had learned manual communication from infancy. The other was a deaf child who had not. From five schools for the deaf, a preliminary matching led to 105 children of deaf parents being matched with 337 deaf children of hearing parents. All

children were 10 years of age or over. Data collected by parental questionnaires were used in pairing of children. Pairs of subjects were matched and tested with regard to several variables. The deaf children who had learned to communicate manually from infancy were superior to the group without early communication experiences in speechreading, reading, and written language. It was concluded that, when the influence of early manual communication is present, this influence helps the development of conventional language skills. (JC)

ABSTRACT 21271

EC 02 1271 ED 003 085
Publ. Date 65 41p.
Dolandsky, Ladislav And Others
Teaching of Intonation and Inflections to the Deaf.
Northeastern University, Boston, Massachusetts
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
BR-5-1852 CRP-S-281

Descriptors: exceptional child research; teaching methods; aurally handicapped; deaf; feedback; technology; instructional technology; speech instruction
Research was conducted in the development and testing of a self-monitoring

method of teaching proper intonation and inflection patterns to the deaf. The teaching method included use of a visual display which is based on pitch information derived from a live speech signal. Four profoundly deaf children were the subjects for the experiment. A speech extractor (oscillograph) was used to visually display voice sounds produced by the instructor and subjects. Instruction in vowel sounds was aided by having each subject touch the instructor's throat while at the same time touching his own. In addition, diaphragmatic breathing and better sitting posture were introduced. The following conclusions were reached: the concept of teaching pitch variation or pitch inflection to deaf individuals using a self-monitoring device such as the pitch extractor is possible; volume and duration are the most significant factors in the production of the visual display; knowledge of the subject appears to be important for successful performance; and attention and interest spans are important variables to be considered in the teaching process. Further research was recommended with respect to increasing the number of lessons, using deaf children with above average IQ, and perfecting the equipment and techniques. (AW)

ABSTRACT 21471

EC 02 1471 ED 034 349
Publ. Date Jul 69 94p.
Hanson, Grace Haen And Others
Relationships among Audiological Status, Linguistic Skills, Visual-Motor Perception, and Academic Achievement of Deaf Children. Final Report.

Texas University, Austin
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-4-7-002353-2051
BR-6-2353

Descriptors: exceptional child research; aurally handicapped; perception; psycholinguistics; academic achievement; visual perception; perception tests; perceptual motor coordination; reading tests; language ability; deaf

To determine whether interrelationships existed among visual motor perception, linguistic skills, academic achievement, and the audiological status of deaf children, 199 subjects functioning from dull normal to superior in intelligence (aged 5.6 to 11) were studied. The results of the testing revealed that visual-motor-perceptual dysfunction is more frequently found in deaf than hearing children, and this lag does not seem to be the result of brain damage; a visual perceptual lag is more often found in those who test at a dull normal level; and a positive relationship exists between visual motor perception and intelligence, linguistic ability, and academic status. Some recommendations were that differential diagnostic testing should include assessment of visual motor perceptual functioning, training in this function should be emphasized throughout elementary school, motor encoding should be used for concept learning, a refined teacher evaluation scale for assessing language is needed, and further studies along these lines should be made. (Author/JM)

ABSTRACT 21474

EC 02 1474 ED 034 352
Publ. Date Aug 69 21p.
Quigley, Stephen P.
Research on Some Behavioral Aspects of Deafness.
Illinois University, Urbana, Institute Of Research On Exceptional Children
Rehabilitation Services Administration (DHEW), Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child research; aurally handicapped; finger spelling; college choice; supervisors; language ability; residential schools; occupational surveys; administrator evaluation; program evaluation; research reviews (publications); standards; manual communication; college students; academic ability

One of three projects included examined the effects of combined speech and fingerspelling on the development of language and communication using a survey of over 200 subjects from six residential schools. The results showed that fingerspelling in combination with speech leads to improved achievement, shows no detrimental effects on the acquisition of oral skills, is best with young children, and is useful enough to indicate that those working with the deaf should be familiar with manual communication. A second study was

conducted to determine the success of the deaf attending regular institutions of higher education. Results indicated that those attending regular institutions came from socioeconomic backgrounds similar to the general college population, their school background was generally in oral residential schools, and successful completion depended simply on academic ability. An ongoing project to investigate occupational status is mentioned. Results of a survey concerning supervision and supervisors in programs for the deaf indicated the following needs: increased supervision, improved quality of supervision, setting professional standards for supervisors, and discussion and resolution of problems in supervision by professional persons in education. (JM)

ABSTRACT 21489

EC 02 1489 ED 034 367
 Publ. Date Jun 69 100p.
 Craig, William N.; Collins, James L.
Communication Patterns in Classes for Deaf Students. Final Report.
 Pittsburgh University, Pennsylvania, School Of Education
 Office Of Education (DHEW), Washington, D. C.
 EDRS mf,hc
 OEG-0-8-000640-1863(032)
 BR-7-0640

Descriptors: exceptional child research; aurally handicapped; classroom communication; classroom observation techniques; interaction process analysis; student teacher relationship; age differences; communication (thought transfer); teaching methods; oral communication; manual communication

To develop a system for making systematic observations of classroom communicative interaction, to provide guidelines for its utilization, and to suggest applications of this system to problems in the development of communication skills, 94 deaf children were directly observed in class interaction. An evaluation instrument was developed from the Flanders system and employed 20 categories and 11 modes of description. Results showed that in all grade levels the majority of communication was teacher initiated, but that at higher levels there was a gradual increase in student response and initiation. Questioning and informing were the two most frequently observed categories used by teachers in both language-dependent and specialized instruction; these categories were also the ones used most frequently by students in initiating communication. The oral mode was predominant at primary and intermediate levels in the day and residential schools in which data was gathered, but non-oral modes increased noticeably on the high school level in the residential school but not in the day school. Suggestions were that this instrument be used in further research in an effort to adjust the behavior of students and teachers. (JM)

ABSTRACT 21491

EC 02 1491 ED 034 369
 Publ. Date Jun 69 348p.
 Brill, Richard G. And Others
Pilot Program with Seriously Emotionally Disturbed Deaf Children. Final Report.
 California School For The Deaf, Riverside
 Office Of Education (DHEW), Washington, D. C., Bureau Of Research
 EDRS mf,hc
 OEG-4-7-062422-0208

Descriptors: exceptional child research; aurally handicapped; emotionally disturbed; case studies (education); behavior change; parent attitudes; reading achievement; arithmetic; parent counseling; program evaluation; reinforcement; student evaluation; clinical diagnosis; adjustment (to environment)

To modify behavior and teach basic skills and subject matter, 16 emotionally disturbed deaf boys were involved in a pilot project to enable them to return to regular classes. The program featured a small staff-pupil ratio, application of behavior modification techniques, engineered instruction, individualized self-instructional curriculum materials, coordinated classroom and dormitory activities, manual communication, and parent education. Results showed that changes in class conduct and self-control were significant; reading skills showed good improvement; significant gains were made in arithmetic; interpersonal rapport improved among the boys and also with adults; and parents were enthusiastic about changes in their children. One of the 16 boys is deceased, one returned to a psychiatric hospital, and eight of the remaining 14 became successful participants in regular classes for the deaf. Extensive appendixes, tables, lists of figures pertaining to the project results, and case studies are included. (Author/JM)

ABSTRACT 21603

EC 02 1603 ED N.A.
 Publ. Date Mar 70 6p.
 Matkin, Noel D.; Olsen, Wayne O.
Response of Hearing Aids with Induction Loop Amplification Systems.
 EDRS not available
 American Annals Of The Deaf; V115
 N2 P73-8 Mar 1970

Descriptors: exceptional child research; aurally handicapped; loop induction systems; hearing aids; electronic equipment; instructional aids; audio equipment; Induction Loop Amplification

To evaluate hearing aids in relation to loop amplification in a classroom situation, the frequency response and acoustic output of three hearing aids set to the loop position were compared. The results indicated that all three aids had less (10 to 15 dB) acoustic output when used with the classroom loop, and in one case a marked change in frequency response. Undesirable changes in acoustic output and frequency response were revealed

when the aids were switched from the microphone to the telephone position, and the situation became more complex as the orientation of the loop to the aid was changed. The conclusion is that research and testing should be done in the classroom setting and not simply under laboratory conditions. (Author/JM)

ABSTRACT 21604

EC 02 1604 ED N.A.
 Publ. Date Mar 70 7p.
 Craig, William N.; Collins, James L.
Analysis of Communicative Interaction in Classes for Deaf Children.
 EDRS not available
 American Annals Of The Deaf; V115
 N2 P79-85 Mar 1970

Descriptors: exceptional child research; aurally handicapped; communication (thought transfer); student teacher relationship; communication skills; receptive language; expressive language; oral communication; manual communication; classroom observation techniques

To provide a quantifiable instrument for direct observation and measurement of communication in classes for deaf children, an instrument based on Flander's categories was developed and tested. The system used 20 categories of communication (nine teacher initiated, nine student initiated, and two lack of communication) and 11 modes of communication; classes from primary through high school were observed. The results indicated that teachers dominated initiation of classroom communication, that questioning and informing were the most used categories, that in the lower grades informing was the most frequent student response while in high school questioning was, and that no real relationship could be discovered between mode of communication and categories. Conclusions were that the instrument appeared effective for observation, and that research is needed into the relationship of teacher versus student initiated communication. (JM)

ABSTRACT 21605

EC 02 1605 ED N.A.
 Publ. Date Mar 70 7p.
 Hicks, Doin E.
Comparison Profiles of Rubella and Non-Rubella Deaf Children.
 EDRS not available
 American Annals Of The Deaf; V115
 N2 P86-92 Mar 1970

Descriptors: exceptional child research; aurally handicapped; rubella; preschool programs; behavior patterns; educational planning; parent education; educational methods; individual characteristics

Comparisons are presented in statistical tables and graphs of the numbers and relationships of rubella and non-rubella deaf children. Information is supplied on birthdates, pure tone thresholds, etiology, degree of hearing loss, types of hearing aids, additional handicaps, and

psycho-social index scores. Indications are that the rubella deaf child is more active and more easily distracted than other deaf children, and that these factors must be considered in adapting educational techniques to their problems, but they have potential similar to other deaf children. The author urges research into the results of educational approaches and the medical and clinical findings concerning rubella affected children. (JM)

ABSTRACT 21827

EC 02 1827 ED N.A.
 Publ. Date 69 7p.
 Joiner, Lee M. And Others
Predicting the Academic Achievement of the Acoustically-Impaired Using Intelligence and Self-Concept of Academic Ability.
 EDRS not available
 Journal Of Special Education; V3 N4
 P425-31 Win 1969

Descriptors: exceptional child research; aurally handicapped; ability identification; self concept; self evaluation; academic achievement; intelligence tests; evaluation; predictive ability (testing)

To determine whether and to what extent a measure of intelligence adds to the predictive efficiency of self concept of academic ability in hearing impaired students, 80 students from grades 10, 11, and 12 were studied. Comparative data came from approximately 1800 nonimpaired tenth grade students. Measures used were intelligence, grade point average (GPA) in academic subjects, and self concept of academic ability (SCA). The results showed that the correlation between SCA and GPA is always larger than that between IQ and GPA; since SCA and IQ show less than 25% shared variation, the inference is that they do not measure the same thing; and behaviors of the hearing impaired and nonimpaired are similar enough to use the same measurement formula. The author's conclusion is that the student's estimate of his ability may affect his achievement more than his intelligence. Tables of results and measurement formulas are included. (JM)

ABSTRACT 21985

EC 02 1985 ED 035 998
 Publ. Date Jun 69 106p.
 Quigley, Stephen P.
The Influence of Fingerspelling on the Development of Language, Communication, and Educational Achievement in Deaf Children.
 Illinois University, Urbana, Institute For Research On Exceptional Children
 Rehabilitation Services Administration (DHEW), Washington, D. C.
 EDRS inf,hc

Descriptors: exceptional child research; aurally handicapped; finger spelling; language development; communication skills; manual communication; oral communication; sign language; language ability; reading ability; academic achievement; deaf; teaching methods; Rochester Method

Two studies were made of the Rochester Method of combining fingerspelling with speech and of its effects on development of language and communication in profoundly, prelingually deaf children. A survey tested school performances of 200 subjects from six residential schools for the deaf, three of which used the Rochester Method and three which used various combinations of oral and manual communication methods. An experimental study compared two matched groups of 16 deaf children, one using the Rochester and the other the oral method, after 4 years on measures of language and communication. The survey showed children using the Rochester Method were superior on measures involving meaningful language. The experimental study also indicated that those using the Rochester Method exceeded the other on reading, written language, and speechreading abilities. It was thus concluded that the Rochester Method can lead to higher scholastic achievement, need not deter acquisition of oral skills, and is more beneficial when started with younger children. (JB)

ABSTRACT 22158

EC 02 2158 ED N.A.
 Publ. Date May 70 9p.
 Thomas, Ian B.; Snell, Ronald C.
Articulation Training through Visual Speech Patterns.
 EDRS not available
 Voice Review; V72 N5 P310-8 May 1970

Descriptors: exceptional child research; aurally handicapped; articulation (speech); speech therapy; teaching methods; auditory perception; visual stimuli

The testing and evaluation of a machine which provides a real-time visual display of first versus second formant frequencies is described. In a pilot test, hearing subjects were trained to identify visual patterns corresponding to 20 monosyllabic English words enunciated by a male speaker. An average identification score of 97% was obtained by five subjects after a training period of less than one hour. Subsequently, three profoundly deaf male subjects attempted, during training periods of two or three hours, to match visual patterns corresponding to 16 correctly articulated monosyllabic English words. The intelligibility of the words spoken by the deaf subjects after training was found to be considerably higher than the intelligibility of the same words recorded prior to training. (Author)

ABSTRACT 22403

EC 02 2403 ED N.A.
 Publ. Date 67 228p.
 Vaughn, Gwenyth R.
Education of Deaf and Hard of Hearing Adults in Established Facilities for the Normally Hearing. Final Report.
 Idaho State University, Pocatello
 Rehabilitation Services Administration (DHEW), Washington, D. C.
 EDRS not available

Department Of Speech Pathology And Audiology, Idaho State University, Pocatello, Idaho 83201.

Descriptors: exceptional child research; aurally handicapped; regular class placement; program evaluation; adults; academic education; technical education; special programs; multiply handicapped; communication skills; ancillary services; teaching methods

The purpose of the project was to determine the effectiveness of a trade, technical and academic program in existing educational facilities when certain techniques were introduced to help overcome communication problems for limited hearing persons: deaf, partially hearing, hard of hearing, multiply handicapped. Various supportive techniques were introduced to aid the educational achievement of 41 hearing impaired students at Idaho State University including the following: training in communication skills; special assistance in classroom and assigned work; and development of personal-social orientation. Student achievement was assessed by pre- and post-program testing, rating committees, and degree of job satisfaction (employee, employer). Results indicated that comprehensive supportive measures can provide a means of assisting the hearing impaired to develop their full educational potential within educational facilities for the normally hearing. The study recommends wider establishment of supportive programs, creation of multidisciplinary traineeships, national consultant pools, and central data collection. (JB/Author)

ABSTRACT 22546

EC 02 2546 ED 038 816
 Publ. Date Jul 69 169p.
 Neyhus, Arthur I. And Others
Speechreading Failure in Deaf Children. Final Report.
 Northwestern University, Evanston, Illinois, Institute For Language Disorders
 Office Of Education (DHEW), Washington, D. C., Bureau Of Education For The Handicapped
 EDRS inf,hc
 OEG-3-7-062582-2084
 BR-6-2582

Descriptors: exceptional child research; aurally handicapped; lipreading; success factors; deaf; language skills; memory; intelligence factors; neurological defects; visual perception; auditory perception; hearing loss; verbal ability; nonverbal ability; reading comprehension; composition skills (literary); motor development; sensory integration

To investigate the problem of speechreading failure, a battery of tests was administered to 60 deaf children, half of them poor learners and half good. Results indicated that those who developed speechreading did so at an early age and could deal with words, phrases, and sentences spoken at any rate whereas poor learners comprehended only words spoken slowly. Good learners were superior on measures of intellectual ability,

reading comprehension and written language, and sequential and spatial memory. Factorial analyses also indicated that the good learners had more highly integrated and organized mental abilities. Neurological studies revealed positive neurological signs in poor learners; electroencephalographic studies did not discriminate significantly between the good and poor learners but did distinguish between the brain functioning of deaf and hearing children; ophthalmological studies indicated a high incidence of visual abnormalities in both experimental groups. (Author/JD)

ABSTRACT 22598

EC 02 2598 ED N.A.
Publ. Date 70 289p.
Rainer, John D., Ed. And Others
Family and Mental Health Problems in a Deaf Population. Second Edition.
EDRS not available
Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 (\$12.00).

Descriptors: exceptional child research; aurally handicapped; mental health; psychiatric services; psychological evaluation; adults; psychotherapy; twins; statistical data; communication problems; research needs; family problems; personality; emotionally disturbed

In response to the growing concern with the psychiatric needs of the deaf, information from two statistically representative and independent samples, the total New York State population of literate deaf persons over twelve years of age, and deaf twins of all ages living in the eastern half of the United States, were studied. The report contains results of research, programs, psychiatric treatment areas, and outlines recommendations for future work. Chapters on deafness and depression, and communicating with the deaf have been added. (GD)

ABSTRACT 22656

EC 02 2656 ED N.A.
Publ. Date Jul 70 11p.
Craig, Helen B.
Reinforcing Appropriate Visual Attending Behavior in Classes of Deaf Children.
EDRS not available
American Annals Of The Deaf; V115 N4 P481-91 Jul 1970

Descriptors: exceptional child research; aurally handicapped; reinforcement; visual learning; attention control; operant conditioning

Three experiments were undertaken involving aurally handicapped children with visual attending problems (ages 6 to 10 years) to determine whether or not operant conditioning could increase visual attending. From lows of attending approximately 25% of the time, at the end of the experiments the attending time had increased to about 80% overall. The experiments used behavior modification techniques including positive reinforcement (with and without extinction) with tokens and eventually only social reinforcement. The experiments were considered a success. (JM)

ABSTRACT 22680

EC 02 2680 ED N.A.
Publ. Date Mar 70 4p.
Brill, Richard G.
The Superior IQ's of Deaf Children of Deaf Parents.
EDRS not available
Maryland Bulletin; V90 N6 P97-8, 110-1 Mar 1970

Descriptors: exceptional child research; aurally handicapped; parents; deaf; children; performance tests; intelligence quotient; manual communication; finger spelling

Intelligence test scores of 64 deaf children of deaf parents who had used signs or fingerspelling with the child before he entered school and 88 prelingually deaf children of hearing parents who had never used signs or fingerspelling with the child before he entered school were examined. Performance-type intelligence tests (WAIS, WISC, or Leiter) had been administered to the children between the ages of 6 and 19 years. Mean IQ for children of deaf parents was 113; for children of hearing parents, mean IQ was 104. The difference was statistically significant (p less than .01). Deaf children of deaf parents have a headstart in developing thinking processes. Hearing parents should use manual communication with their preschool age deaf children. (MS)

ABSTRACT 22722

EC 02 2722 ED 039 664
Publ. Date Jan 70 97p.
McConnell, Freeman; Horton, Kathryn B.
A Home Teaching Program for Parents of Very Young Deaf Children. Final Report.
Vanderbilt University, Nashville, Tennessee, School Of Medicine
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-32-52-0450-6007
BR-6-1178

Descriptors: exceptional child research; aurally handicapped; preschool programs; parent participation; auditory training; auditory evaluation; hearing aids; parent education; deaf; language development; hearing loss; parent attitudes; infancy

A demonstration home provided a parent oriented program and audiologic management for 94 deaf preschoolers (mean age 2 years 4 months). Each child underwent a trial period with different hearing aids before permanent recommendation was made. Parents were present at these clinic sessions; they also received instruction in how to encourage auditory behavior, orient the child to sound, and talk to the child. Findings over 3 years indicated that language age growth accelerated while performance age and nonverbal mental age remained linear. Also, ability to use amplification from the wearable hearing aid improved, with an improved mean threshold response to spoken voice of more than 20 dB. The parents mobilized

themselves into pressure groups resulting in legislation for education of deaf preschoolers. Community approval of the project resulted in continuance of its services after federal funding ceased. (Author/JD)

ABSTRACT 22737

EC 02 2737 ED 039 679
Publ. Date Dec 69 110p.
Allen, Doris V.
Modality Aspects of Mediation in Children with Normal and with Impaired Hearing Ability. Final Report.
Wayne State University, Detroit, Michigan
Office Of Education (DHEW), Washington, D. C., Bureau Of Education For The Handicapped
EDRS mf,hc
OEG-0-8-070837-1858
BR-7-0837

Descriptors: exceptional child research; aurally handicapped; cognitive processes; verbal learning; mediation theory; paired associate learning; retention; response mode; visual learning; visual perception; auditory perception; auditory training; cognitive development; learning characteristics; nonverbal learning; verbal stimuli

Three experiments tested whether qualitative differences in processing of verbal materials result from congenital hearing impairment. Subjects were children with hearing levels equivalent to grades 4 to 6. Experiment 1 used repeated measurements with two modes of response and two kinds of cues; experiment 2 used acoustic similarity to produce interference with learning; experiment 3 presented word triads for short term retention. Results on the first two indicated that normal hearing subjects employed implicit acoustic features of printed materials while hearing handicapped subjects encoded the material using visual aspects. Also, the effects of auditory training were apparent, with its lack noted in the performance of children with very mild losses from 0 to 25 decibels. (Author/JD)

ABSTRACT 22738

EC 02 2738 ED 039 680
Publ. Date Feb 70 66p.
Luterman, David M.
A Parent-Centered Nursery Program for Pre-School Deaf Children. Final Report.
Emerson College, Boston, Massachusetts
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-1-6-062069-1591
BR-6-2069

Descriptors: exceptional child research; aurally handicapped; preschool programs; parent participation; parent education; academic achievement; infancy; nursery schools; parent attitudes; language development

A nursery program for 48 deaf children aged from 1 1/2 to 3 years require active participation of the parents. Parents selected the program, tutored their and

other children, observed behavior in the nursery which included hearing children, and participated in discussion of family problems. In followup, about three-fourths of the children and of their parents were rated above average by classroom teachers of the deaf. However, these results may have been due to the passive admission procedures. Parents who were not middle class seeking or who had severe personal problems did not appear to benefit. Those who were became active lobbyists for deaf children in the state. (Author/JD)

ABSTRACT 22742

EC 02 2742 ED 039 684
 Publ. Date Aug 69 202p.
 Taylor, Louise Todd

A Language Analysis of the Writing of Deaf Children. Final Report.

Florida State University, Tallahassee, Department Of English

Office Of Education (DHEW), Washington, D. C., Bureau Of Education For The Handicapped

EDRS mf,hc

OEG-4-9-192057-0009-032

BR-19-2057

Descriptors: exceptional child research; aurally handicapped; language development; written language; generative grammar; deaf; transformation generative grammar; child language; language usage; sentence structure; language patterns; syntax; composition skills (literary)

Samples of written language were collected from 140 congenitally deaf children at grade levels 3, 5, 7, and 9. The samples were then subjected to error, quantitative, and transformational analysis. Findings suggested a relationship between the order in which the deaf child acquires the rules of his language and the ordering of rules in a theoretical description of the generative process, with rules occurring early in the generative process generally being acquired earlier than rules occurring later. Furthermore, the order in which the deaf child acquired rules seemed similar to that observed in much younger hearing children. In the early stages of language development both hearing and deaf children reduced the frequency of errors in their writing more quickly than in later stages. Other findings suggested that, although the levels of performance of deaf and hearing differed markedly, differences in rate of development were not great. (Author/JD)

ABSTRACT 22761

EC 02 2761 ED N.A.
 Publ. Date Sep 66 5p.
 Carr, Josephine

Administrative Problems in the Education of the Deaf.

Oregon College Of Education, Monmouth

EDRS not available

American Annals Of The Deaf; VIII N4 P552-6 Sep 1966

Descriptors: exceptional child research; aurally handicapped; administration; administrative problems; special pro-

grams; questionnaires; public schools; private schools; day schools; residential schools; problems; counseling; personnel; public relations; educational problems; financial problems

Administrative problems in the education of the deaf were studied in order to identify and describe the kinds of problems, determine any relationship between these problems and the factors of type and geographic location of the school, and compare the more significant problems with those of special education programs, as reported by M.V. Wisland and T.D. Vaughan (1964). A questionnaire consisting of 40 problem statements was sent to administrators of 94 schools for the deaf. Included were day, residential, public, and private schools. The administrators rated each problem and problem area according to a five-point scale. Eighty replies, or 85% of the sample were received. The mean rating for all problems by all respondents was 2.64, with a standard deviation of .54. Geographic location and type of school resulted in only slight variations. In general, the administrators of schools for the deaf found the eight problem areas and the ten problems to be of greater significance than did the administrators of special education programs in the Wisland and Vaughan study. Differences between the two groups would seem to lie in the areas of developing new programs, obtaining physical facilities, and counseling parents, for administrators of schools for the deaf did not consider these problems as significant as those in the areas of psychological counseling for children, supervisory personnel, and utilizing personnel effectively. Both groups rated education of the public as the major problem area. Finance was of prime concern for administrators of special education programs, but only of average importance for administrators of schools for the deaf. Lists, tables, and a 22-item bibliography are provided. (HK)

ABSTRACT 22763

EC 02 2763 ED N.A.
 Publ. Date Sep 66 12p.

Giangreco, C. Joseph

The Hiskey-Nebraska Test of Learning Aptitude (Revised) Compared to Several Achievement Tests.

Iowa School For The Deaf, Council Bluffs

EDRS not available

American Annals Of The Deaf; VIII N4 P566-77 Sep 1966

Descriptors: exceptional child research; aurally handicapped; deaf; prognostic tests; achievement tests; arithmetic; reading; academic achievement; prediction; predictive ability (testing); Hiskey Nebraska Test of Learning Aptitude

The purpose of this research was to explore the relationship between the learning age obtained in the Hiskey-Nebraska Test of Learning Aptitude (Revised) and several achievement scales to determine whether the Hiskey test could be used as a predictor of academic

achievement for deaf children. Subjects were 235 deaf children broken into seven groups by age and grade level. Tests administered along with the Hiskey-Nebraska were the Stanford Achievement, Gates Reading, and Metropolitan Achievement Tests. A Teacher Rating Scale was also used. Arithmetic Computation and Arithmetic Reasoning showed the highest and most consistent correlations at all age levels (generally at the .05 level of confidence). Low correlations were obtained mostly in areas requiring reading skills. Significant and high correlations (.05 significance on all tests) were found in the low elementary and advanced high school years, indicating that it may be possible to predict academic achievement at these levels with the Hiskey-Nebraska Test. However, few significant correlations were obtained for the upper elementary years (fifth through ninth year levels). The cause of failure was not determined, but several causes were suggested. Three graphs and 26 correlation tables are provided. (HK)

ABSTRACT 22807

EC 02 2807 ED 034 369
 Publ. Date Jun 69 348p.

Brill, Richard G. And Others

Pilot Program with Seriously Emotionally Disturbed Deaf Children. Final Report.

California School For The Deaf, Riverside

Office Of Education (DHEW), Washington, D. C., Bureau Of Research

EDRS mf,hc

OEG-4-7-062422-0208

BR-6-2422

Descriptors: exceptional child research; aurally handicapped; behavior change; intervention; program descriptions; emotionally disturbed; deaf; academic achievement; parent education; interpersonal competence; programed instruction; manual communication; reinforcement

A pilot project involved 21 emotionally disturbed deaf boys, all of whom had had no success in regular school attendance and several of whom had been excluded. Objectives were to modify behavior and to teach basic skills and subject content, enabling the boys to return to regular classes for the deaf. Features of the program were a small staff-pupil ratio, application of behavior modification, engineered instruction, individualized self instructional curriculum materials, coordinated classroom and dormitory activities, manual communication and parent education. Results indicated significant changes in class conduct and self control and significant gains in reading and arithmetic. Parents were enthusiastic about changes in the child, but made no meaningful changes in their own personal dimensions. Of the boys, one returned to a psychiatric hospital and nine successfully returned to regular classes for the deaf. (Author/JD)

ABSTRACT 22870

EC 02 2870 ED 040 522
 Publ. Date Oct 69 126p.
 McConnell, Freeman And Others
A Study of Current Practices in Education for Hard-of-Hearing Children. Final Report.
 American Speech And Hearing Association, Washington, D. C., Joint Committee On Audiology And Education Of The Deaf
 Office Of Education (DHEW), Washington, D. C.
 EDRS mf,hc
 OEG-0-8-071039-0188(032)
 BR-7-1039

Descriptors: exceptional child research; aurally handicapped; educational needs; identification; educational programs; clinics; deaf; hard of hearing; public schools; special schools; state agencies; professional personnel; ancillary services

Descriptive data were gathered from state departments of education and health, local school districts, speech and hearing clinics, and residential and day schools for the deaf and hard of hearing. Site visits were made to 10 school districts. Results demonstrated that more emphasis was being placed upon the identification of children with hearing loss than upon the education and continued re-evaluation of these children. Site visits confirmed the impression that there was a lack of understanding of the special educational needs of hard of hearing children. State departments were generally unable to affect identification or educational programs. Schools for the deaf were frequently required, by default, to accept hard of hearing children, but only infrequently made special provisions for them. Clinics identified their chief function as providing identification and communication skills development services for preschool children. Recommendations were made involving educational, leadership, and research needs. (Author/JD)

ABSTRACT 22873

EC 02 2873 ED 040 525
 Publ. Date 69 66p.
 Quigley, Stephen P. And Others
Educational and Occupational Status of Young Deaf Adults in Illinois.
 Illinois University, Urbana, Institute For Research On Exceptional Children Rehabilitation Services Administration (DHEW), Washington, D. C.
 EDRS mf,hc

Descriptors: exceptional child research; aurally handicapped; occupational surveys; young adults; group status; academic achievement; job placement; day schools; residential schools; vocational adjustment; questionnaires; educational status comparison

A questionnaire was used to obtain information from 464 hearing impaired individuals concerning occupational status and to determine any relationship between types of educational programs attended and later occupational achievement. Subjects had attended exclusively

one of four types of programs: residential, day school programs in Chicago, day school programs in other areas of Illinois, and public school classes for the general population. Analysis of the data revealed similarities among groups in wages received for given occupations and job satisfaction. Residential groups reported lower hearing ability and socio-economic level. Non-residential groups reported more professional, technical, and clerical employment; more social and marital involvement with normally hearing persons; better oral communication skills; a greater value on oral communication as related to job performance and advancement. (JB)

ABSTRACT 22906

EC 02 2906 ED 040 558
 Publ. Date Aug 67 178p.
 Pronovost, Wilbert And Others
The Development and Evaluation of Procedures for Using the Voice Visualizer as an Aid in Teaching Speech to the Deaf. Final Report.
 Boston University, Massachusetts Office Of Education (DHEW), Washington, D. C., Bureau Of Research
 EDRS mf,hc
 OEG-1-6-062017-1588
 BR-6-2017

Descriptors: exceptional child research; aurally handicapped; material development; articulation (speech); visible speech; equipment evaluation; deaf; speech improvement; instructional materials; speech therapy; consonants; vowels

A prototype voice visualizer was constructed and a program of instructional materials designed to teach discrimination of minimally paired vowel or consonant sounds. Two groups of 24 deaf children with poor articulatory ability received instruction twice weekly for 4 months; also, a group of eight deaf children with good speech participated in five sessions. Listener ratings indicated both the consonant and vowel groups improved most markedly in the first month. The consonant group improved more, but improvement in articulatory proficiency was not accompanied by corresponding improvement in word intelligibility. The additional group of eight showed improvement in both areas. The visualizer was reportedly easily operated and presented no technical problems. (Author/JD)

ABSTRACT 22945

EC 02 2945 ED N.A.
 Publ. Date 70 6p.
 Matkin, Noel D.; Olsen, Wayne O.
Induction Loop Amplification Systems: Classroom Performance.
 EDRS not available
 ASHA; V12 N5 P239-44 May 1970

Descriptors: exceptional child research; hearing aids; aurally handicapped; loop induction systems; deaf; instructional technology

Hearing aid output was measured for six brands of induction loop amplification (ILA) equipment in 10 classrooms. Re-

sults indicated acoustic gain ranged from 30 to 65 dB and amount of amplification was directly related to the distance of the aid from a segment of the loop. Differences among the ILA systems were found for frequency response curves and for hearing aid output when switched from microphone to loop position, when one of two different teacher's microphones was used, and when the orientation of the aid to the loop was changed. In some instances, high noise levels were generated internally and, in others, traced to external sources. Teacher naivete and insufficient technical information from manufacturers also contributed to variable system performance. Only two ILA installations were judged satisfactory in performance. (Author/JD)

ABSTRACT 22959

EC 02 2959 ED N.A.
 Publ. Date Jan 66 104p.
 Quigley, Stephen P., Ed.
Language Acquisition.
 Alexander Graham Bell Association For The Deaf, Washington, D. C.
 EDRS not available
 The Volta Review; V68 N1 P1-104 Jan 1966

Descriptors: exceptional child research; aurally handicapped; language development; language research; syntax; cognitive development; foreign countries; language instruction; multiply handicapped

The various chapters present recent thinking and research on language development and acquisition, particularly as related to the acquisition of language by deaf children. Topics include: The Capacity for Language Acquisition (specifically, the acquisition of syntax), by David McNeill; Implications for Language and Cognition, by Hans G. Furth; Language Acquisition of Deaf Children, by Robert L. Cooper and Joseph Rosenstein; Language Research in Other Countries Than the United States, by Stephen P. Quigley; Language Instruction for the Deaf, by Philip J. Schmitt; and Acquisition of Language by Deaf Children with Other Disabilities, by Frank B. Withrow. (KW)

ABSTRACT 23371

EC 02 3371 ED N.A.
 Publ. Date Jun 70 8p.
 Hodgson, William R.; Murdock, Charles Jr.
Effect of the Earmold on Speech Intelligibility in Hearing Aid Use.
 EDRS not available
 Journal Of Speech And Hearing Research; V13 N2 P290-7 Jun 1970

Descriptors: exceptional child research; aurally handicapped; hearing aids; auditory perception; sensory aids; electronic equipment; audiometric tests; earmold

Aided speech intelligibility scores were obtained in quiet and in noise from 18 subjects with high-frequency sensorineural loss, using standard, vented, and open earmolds. Results showed that scores obtained through the open earmold were superior to those obtained

through the standard earmold, both in quiet and in noise. There were no significant differences between the standard and vented earmold, or between the open and vented earmold. Twelve of the subjects preferred the open earmold. (Author)

ABSTRACT 23437

EC 02 3437 ED 041 408
Publ. Date Oct 68 239p.
Lewis, M. M.

Language and Personality in Deaf Children.

National Foundation For Educational Research In England And Wales, London

EDRS not available

National Foundation For Educational Research In England And Wales, 79 Wimpole Street, London, W.1., England.

Descriptors: exceptional child research; aurally handicapped; language ability; language development; social development; vocabulary skills; social maturity; personality development; educational improvement; language research; sex differences; age differences; maturation; family relationship

To discover whether linguistic retardation shows itself in vocabulary concerned with the orotic characteristics of children and whether a relationship exists between linguistic retardation and orotic immaturity, children were studied (ages 8 to 16) from 11 schools for the hearing impaired. Discussed as background is the general linguistic development of deaf children including language characteristics, patterns of communication from the child and from the behavior of others, and language in cognitive and orotic development. The children were tested on hearing, intelligence, personality, and vocabulary over a 2-year period and were compared to a group of normal hearing and a group of partially hearing children. The results indicated that hearing impaired children tended to be retarded in their linguistic development; they were retarded in vocabulary but even more retarded in orotic vocabulary; they had a smaller vocabulary of family relationships which lowered with the distance of relatives; their pictured situation vocabulary was lower; and girls seemed more advanced than boys in language development. Extensive tables of results and their implications are provided. (JM)

ABSTRACT 23440

EC 02 3440 ED 041 410
Publ. Date Oct 69 185p.

Fiedler, Miriam Forster

Developmental Studies of Deaf Children. ASHA Monographs, Number 13.

American Speech And Hearing Association, Washington, D. C.

Rehabilitation Services Administration (DHEW), Washington, D. C.

EDRS mf, hc

ASHA Monographs, American Speech And Hearing Association, 9030 Old Georgetown Road, Washington, D. C. 20014 (\$4.00).

Descriptors: exceptional child research; aurally handicapped; case studies (education); academic achievement; individual development; deaf; educational needs; sex differences; longitudinal studies; auditory evaluation; hard of hearing; parent attitudes; multiply handicapped; emotional development; residential schools; student placement; language development

The development and progress of 20 children in a residential oral school for the deaf were studied over 7 years through testing, observation, and examination of school records. Followup was done when the children were in their 10th and 11th years of school. Audiologic examinations were also given. Results indicated that none of the 20 had his deafness discovered in infancy or received followup by immediate, parent oriented therapy. One-fourth of the group should have been placed in programs for the hard of hearing, not deaf; one-third in programs for the multiply handicapped. Boys were more handicapped in learning than were girls. Educational needs involved consideration of the effects of early residential placement and alternatives to it and better understanding of language learning and of developmental stages of growth and emotional factors in learning. (Author/JD)

ABSTRACT 23462

EC 02 3462 ED 041 424
Publ. Date Apr 70 47p.
Gentile, Augustine; DiFrancesca, Sal

Item Analysis of Academic Achievement Tests--Hearing Impaired Students.

Gallaudet College, Washington, D. C., Office Of Demographic Studies
Office Of Education (DHEW), Washington, D. C.

EDRS mf, hc

Gallaudet College Book Store, Washington, D. C. 20002 (\$1.00).

Descriptors: exceptional child research; aurally handicapped; academic achievement; student evaluation; psychometrics; achievement tests; item analysis; statistical data; test results; test reliability; Stanford Achievement Test

An item analysis of the Stanford Achievement Test performance of about 12,000 students in schools and classes for the hearing impaired is presented. Tables show the percentage of correct answers to each question, as well as a summary of the responses for each sub-test and major categories within some sub-tests. Because the test was developed for use with normal hearing students, the reliability and validity of the test results are discussed. Three appendices present information about The Annual Survey of Hearing Impaired Children and Youth, a copy of the annual census of hearing impaired children form, and a list of participants in the Annual Survey of Hearing Impaired Children and Youth 1968-69 School Year. (GD)

ABSTRACT 23469

EC 02 3469 ED 041 430
Publ. Date Feb 69 165p.

Dolansky, Ladislav And Others

Teaching of Intonation Patterns to the Deaf Using the Instantaneous Pitch-Period Indicator.

Northeastern University, Boston, Massachusetts

Rehabilitation Services Administration (DHEW), Washington, D. C.

EDRS mf, hc

Descriptors: exceptional child research; aurally handicapped; visible speech; material development; deaf; speech improvement; speech therapy; equipment evaluation; instructional technology; language patterns; intonation; language rhythm

The research was concerned with the experimental use of Model II of the Instantaneous Pitch-Period Indicator (IPPI) with deaf subjects, and with the design and construction of a portable unit. Deaf adults and deaf children participated in training programs designed to develop more effective patterns of speech using the IPPI for visual monitoring of intonation usage. The deaf adults' study suggested equipment modifications, teaching materials, and research design for the children's study. The children's study revealed that deaf children improved during training with the IPPI, most noticeably during the first 4 weeks of the 8-week program. Resulting data on the sequence of rhythm and intonation learning tasks were incorporated into an expanded training program, and new features were designed and constructed into a portable unit designated as Model III, Instantaneous Pitch-Period Indicator: Amplitude, Intensity, Duration (IPPI-AID). (Author/JD)

ABSTRACT 23542

EC 02 3542 ED N.A.
Publ. Date 66 121p.

Frisina, D. Robert; Johnson, Donald D. A Nonverbal Hearing Test for Children with Deafness.

Gallaudet College, Washington, D. C. Office Of Education (DHEW), Washington, D. C.

EDRS not available

OEG-5-0962-4-11-3

Gallaudet College, Florida Avenue And 7th Street, N. E., Washington, D. C. 20002.

Descriptors: exceptional child research; aurally handicapped; a ton; Deaf; Preschool Children; Audiometric Tests; evaluation methods; sensory integration; tactual perception; testing; Bekesy Audiometry; Modified Ascending Bekesy

Eight experiments were completed in the development and quantification of vibrotactile conditioning procedures that led to the measurement of hearing in hearing and deaf subjects ranging from adults to 2 1/2 year olds. A modification of the Radioear B-70A bone conduction transducer was coupled with the Grason-Stadler E-800 Bekesy audiometer to provide a programed stimulus

used to instruct, nonverbally, deaf and hearing subjects to perform routine Bekesy audiometry. Cross-modality generalization from a vibrotactile to an auditory stimulus was found to take place routinely in all age groups. A modification to the E-800 audiometer was developed that would allow a single press of the response switch by the subject to measure his ascending threshold. This procedure, referred to as (Modified Ascending Bekesy (MAB)) was found to be effective with children as young as 2 1/2 to 3 1/2 years of age. (Author)

ABSTRACT 23560

EC 02 3560 ED 042 293
Publ. Date 69 37p.
Bornstein, H.; Kannapel, B. M.
New Signs for Instructional Purposes. Final Report.
Gallaudet College, Washington, D. C.
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-2-6-061924-1890
BR-6-1924

Descriptors: exceptional child research; aurally handicapped; sign language; development; deaf; cued speech; manual communication; vocabulary

To expand sign language for simultaneous use along with fingerspelling and speech, signs were created for English terms frequently used in the classroom. Those signs judged very good or excellent in clarity and appearance were retained and selected ones taught by closed circuit television to Gallaudet students. Entering preparatory students recognized the English equivalent of about 66% of 92 new signs upon initial presentation. Seven months later they recognized about 75%. Upperclassmen were taught signs for specific subject matter in 12 areas and recognized about 80% initially. It was suggested that their higher rate of recognition resulted from increased familiarity with sign language and with the subject content. A listing is provided of the terms developed. (Author/JD)

ABSTRACT 23561

EC 02 3561 ED 042 294
Publ. Date Jun 68 53p.
Withrow, Frank B.; Brown, Donald W.
An Experimental Program of Language Development Using a Systematic Application of Audio-Visual Aids to Reinforce the Classroom Teacher's Program for Children with Impaired Hearing. Final Report.
Illinois School For The Deaf, Jacksonsville
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-6-19-074

Descriptors: exceptional child research; aurally handicapped; language development; audiovisual instruction; lipreading; instructional films; teaching methods; program descriptions; Illinois Communication Scale

Three hundred and six 8mm cartridge-type films were produced to provide deaf

children instruction in and practice with noun vocabulary, question forms, prepositions, and speechreading. Films were placed in 12 classes. Method of presentation and time spent was determined by individual teachers, most of whom had attended a three-day orientation workshop. Group I, consisting of 38 children (median age 8.6) worked with the projectors and language films similar to but not a part of the experimental films for one year. Group II (43 children, median age 7.6) used the experimental films for one year. Group III (29 children, median age 6.6) used both groups of films during two years. To determine progress in speechreading ability, the Illinois Communication Scale (Form B) was administered to each class before and after each year. Group III showed a 50% improvement in speech reading ability over the two years. Group I improved 21.74% while Group II showed 12.00% improvement. Reasons suggested for this are differences in intelligence, previous education, and age, and greater similarity than had been thought between the experimental and non-experimental films. The major criticism related to content (unrelated noun vocabulary). Appendixes include the Illinois Communication Scale and the Evaluation questionnaire. (KW)

ABSTRACT 23565

EC 02 3565 ED 042 298
Publ. Date Dec 69 174p.
Scherer, Patricia A.
Visual Learning Processes in Deaf Children. Final Report.
Northwestern University, Evanston, Illinois
Office Of Education (DHEW), Washington, D. C., Bureau Of Education For The Handicapped
EDRS mf,hc
OEG-3-6-068664-1595
BR-6-8664

Descriptors: exceptional child research; aurally handicapped; reading; teaching methods; reading instruction; lipreading; deaf education; language development

To compare three processes for teaching deaf children to read, 54 deaf children (ages six, eight, and 10 years) were matched according to age, sex, hearing level, intelligence, socioeconomic level, and reading abilities, and were randomly assigned to one of three groups. Group A subjects were given a stimulus which consisted of the read form, the speechread form, and an illustrative picture. Group B presentation included only the read word and a picture. Group C subjects were given the read word and the speechread word. A filmed teaching machine procedure was used (10 presentations over two weeks). A battery of posttests measured changes in learning among 27 variables. Results showed Situation A superior to B on Sentence and Paragraph Comprehension in reading (no differences between B and C). Group A was superior to C in speechreading and error scores, indicating that all three cues (read form, spee-

chread form, and picture) provided for most effective learning, and that speechreading is a noteworthy factor in learning to read. Appendixes include the film format, tests of word recognition, sentence comprehension, and paragraph comprehension, and a bibliography. (KW)

ABSTRACT 23590

EC 02 3590 ED N.A.
Publ. Date Mar 70 10p.
Ross, Mark; Lerman, Joy
A Picture Identification Test for Hearing-Impaired Children.
EDRS not available
Journal Of Speech And Hearing Research; V13 N1 P44-53 Mar 1970

Descriptors: exceptional child research; aurally handicapped; visual measures; auditory discrimination; auditory perception; word recognition; pictorial stimuli; measurement techniques; measurement instruments

A picture identification test for measuring speech discrimination ability in hearing-impaired children was developed in two phases. In the first phase the word stimuli were evaluated to determine whether they were within the recognition vocabulary of the children and whether the pictorial representations of the words were adequate. Before the second phase, the test was revised to consist of 25 plates with six pictures on each plate, with only four of the pictures on each plate used as test stimuli. These four lists were given to 61 hearing-impaired children on two separate occasions. The results indicate reliability coefficients in excess of 0.87 for all four lists, with mean differences of less than 3% and correlation coefficients between lists greater than 0.84. The test appears to be a potentially valuable clinical tool in pediatric audiology. The name selected is the Word Intelligibility by Picture Identification test (WIPI). (Author)

ABSTRACT 23611

EC 02 3611 ED N.A.
Publ. Date Aug 70 11p.
Fitzgerald, Mary Dale And Others
Audiometric, Developmental, and Learning Characteristics of a Group of Rubella Deaf Children.
EDRS not available
Journal Of Speech And Hearing Disorders; V35 N3 P218-28 Aug 1970

Descriptors: exceptional child research; aurally handicapped; rubella; auditory evaluation; hearing loss; intellectual development; learning characteristics

The extent of hearing loss, the audiometric configuration, the sound awareness levels for complex sounds, and the response to amplification were studied in a selected sample of 19 hearing-impaired children born during the 1963-64 rubella epidemic in the mid South. The children ranged in age from three years-eight months, to three years-eleven months. Their physical growth and development were assessed, and their intellectual functioning was evaluated with selected items from the Nebraska Test of Learning Aptitude. The degree

of hearing loss and the configuration in general were compared to studies by Fisch, et. al. The lack of any one predominant type of audiometric curve in the sample suggests the 1963-64 rubella child cannot be easily categorized.

It was found these children were afflicted with rather profound hearing losses, and that the later the occurrence of rubella in the mother the less severe hearing loss in the child. The height, weight, and head circumferences mea-

sured below age level. Intellectual functioning was found at or above age level in opposition to findings of Myklebust, Vernon and Miller; however, these children had all received structured home teaching. (GD)

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